SHAUGHNESSY ASKS: WILL ROBOTS REPLACE DESIGNERS?

COMPUTER ARTS

DESIGN MATTERS

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VR

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resonance

"
WE ALL LIVE IN A RHYTHMIC UNIVERSE. THIS IS MINE.
"

iStock Exclusive Artist **Bülent Gültek**

Making the cover

This issue's stylish cover is the work of Dazzle Ship, a London-based studio that has experimented with VR itself.

"The design was based around the limitless possibilities that virtual realities offer us," explains Dazzle Ship founder Alex Donne-Johnson. "An initial geometric shape was created, and then repeated in a fractal fashion until it formed new patterns within the structure."

Dazzle Ship's concept was based on the idea that VR can create illusions and worlds that are impossible within the constraints of our current reality. "One of the biggest challenges was trying to work with the theme of optical illusions and abstraction, but at the same time still achieve legible typography," Donne-Johnson admits.

"These are not things that go hand-in-hand easily, so compromises had to be made. The cover was created fully in 3D without any post-production tricks, but with the aim of still challenging your sense of perception," he states.
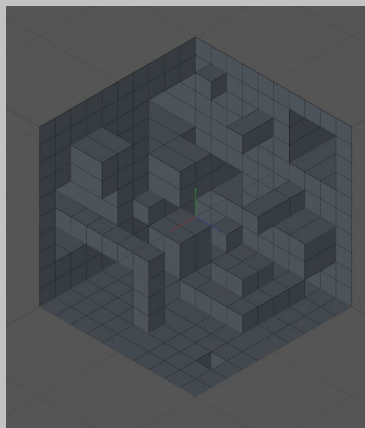
DAZZLE SHIP

Founded by Alex Donne-Johnson, Dazzle Ship is a creative production studio based in London, producing films, digital content and multi-platform campaigns. Clients include Sony, Red Bull, MTV, Levi's and Heineken.
www.dazzleship.com

Editor's letter

Virtual reality is going mainstream. And as the hardware proliferates and becomes even more powerful and affordable, agencies are waking up to the potential for creating truly immersive brand worlds. Following a slew of updates and new devices in 2016 – our inbox was overflowing with press releases – 2017 looks like the year we'll see it come to fruition.

Our special report this month reveals how to make use of VR in branding and advertising campaigns, and takes the temperature of the industry to predict what comes next in this brave new virtual world.

Elsewhere, our D&AD New Blood series continues as we ask how to make your digital work engage where it counts, so you can compete for attention spans and even become more interesting than Netflix – while regular columnist Adrian Shaughnessy ponders if and when we'll all find ourselves replaced by robots anyway.

But if you prefer to hold, stroke or sniff your lovingly crafted design work, rather than have it projected on a visor or generated by an AI bot's algorithm, don't fret – you'll also find plenty of more traditional advice in our freelancer's guide to print, which features video interviews with three successful freelance print designers.

Packed with insights on making it as a freelance graphic designer in a competitive marketplace, as well as insider tips and tricks for preparing your artwork for print, it's a one-stop-shop to improve your craft.

Next month, we explore some of the most exciting cities around the world to live, work and visit as a designer, plus a pro guide to the art and craft of logo design – don't miss it.

● NICK CARSON
Editor
nick.carson@futurenet.com

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FEATURING

ADRIAN SHAUGHNESSY
Adrian Shaughnessy is a graphic designer and writer who runs ShaughnessyWorks and is founding partner of Unit Editions. On page 20, he discusses how robots could end up replacing designers.
www.unitededitions.com

CATERINA BIANCHINI
Caterina has been a freelance graphic designer for about four years, and often works with music companies. She discusses her love of print in our freelancer's guide to print on page 76.
www.caterinabianchini.com

FLORENCE BLANCHARD
Florence Blanchard is a muralist, whose work is directly inspired by her background in science and graffiti. She reveals her creative processes and inspiration on page 56.
www.florenceblanchard.com

MARK BONNER
Mark is co-creative director of GBH London and was 2015's D&AD President. His clients include BMW, Royal Mail and Virgin Galactic. On page 98, he talks about his love for motor racing.
www.gbh.london

LUCILLE CLERC
A graduate of Central Saint Martins, Lucille is a French artist who lives in the city but loves nature. Her clients include the V&A, Fortnum & Mason and Marks & Spencer. On page 92, we find out about her latest screenprinting project.
www.lucilleclerc.com

(mt)

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NICK CARSON
EDITOR
This month, Nick has been busy planning ahead.
He booked a wedding venue by the side of a loch
in Scotland, and started assembling the judging
panel for this year's Brand Impact Awards.

JO GULLIVER
ART EDITOR
Aiming to celebrate her birthday for a whole month,
Jo's latest treat took her to Snowdon. To balance all
the fun, she's gone vegan for January, and has been
trying (but failing) to tackle her fear of deep water.

ROSIE HILDER
OPERATIONS EDITOR
To celebrate turning 30, Rosie went to Paris with
her boyfriend. She had a lovely time eating too much
and admiring the sights, and has also reaffirmed
that she definitely cannot speak French.

KEY CONTRIBUTORS

GARETH JONES
VIDEOGRAPHER
This month, Gareth has been shooting corporate
videos in London for Future's CEO. He's also been
making photography tutorials for N-Photo magazine
and planning a holiday for his birthday in April.

JULIA SAGAR
CONTRIBUTOR-AT-LARGE
Julia has been supervised in her freelance activities
this month by a very badly behaved kitten called
Squid. He hasn't helped on the writing front, but
does play a killer game of chase.

Production notes

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Di Peng
CSM MA Industrial Design 2016

DEMENTIA
SIMULATOR
BY DI PENG

TOO MUCH
INFORMATION
BY THE NATIONAL
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TRENDS

AUGMENTED EMPATHY

We are now able to engage empathy through design, which enables us to quite literally walk a mile in someone else's shoes. New technology means design is being used as a tool to connect us profoundly, in a way that no other form of media can

Both visually and through sensorial distortion, new devices are able to temporarily modify our perception of the world, inhibiting our senses and simulating unfamiliar experiences.

Virtual reality (VR) technologies have often been associated with the gaming world and used primarily for entertainment. The idea of spending more time immersed in the digital world originally seemed as though it might lead us to become self-obsessed zombies with no ability to communicate with each other. We are, however, beginning to see a shift away from recreational usage towards something that could potentially connect individuals from different walks of life in a more profound and intimate way than any other form of media.

Chris Milk, immersive storyteller and co-founder of VR company Within, is at the forefront of this notion of augmented empathy. In his 2015 TED talk, Milk describes VR as a machine: "But through this machine we become more compassionate, we become more empathetic and we become more connected," he explained. "And, ultimately, we become more human."

The Dementia Simulator, designed by Central Saint Martins industrial design MA graduate Di Peng, simulates the symptoms of dementia by disrupting users' sensory perceptions. The device, which sits over the head, distorts the wearer's vision by blurring the faces of those nearby. Critical comments and uncomfortable sounds are played into the wearer's ears, mimicking auditory hallucinations, while a mouthpiece also restricts the wearer's ability to speak certain words. By replicating the experiences of dementia sufferers, the simulator aims to create empathy, re-evaluate misconceptions, and ulimately help people to understand and care for those living with the condition.

Royal College of Art design products MA graduate Heeju Kim has created the Empathy Bridge for Autism, which allows wearers to experience first-hand what it's like for people with autism to see, hear and speak. Kim has designed a series of devices that temporarily change sensory perception. Tools affecting vision, hearing and speech enable the wearer to experience different aspects of living with autism. For example, hypersensitivity to light and colour, double vision, jumbled or amplified sound and difficulties in pronunciation are simulated using the VR device, an earpiece, and a variety of differently shaped lollipops and candies. The product's message is clear: empathy is the bridge to understanding that people with autism are like everyone else, although they see, hear and speak in unique ways.

Finally, the National Autistic Society's Too Much Information campaign, which similarly helps increase understanding of autism, features a VR experience that enables viewers to see the world through the eyes of a 10-year-old autistic boy. The campaign highlights the ways in which autistic people often struggle to filter out sounds, smells and sights, leading them to feel overwhelmed by too much information.

CLOUDS OVER SIDRA
by Gabo Arora & Chris Milk
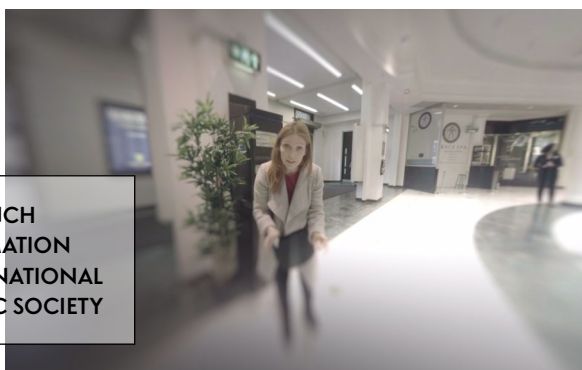
CLOUDS OVER SIDRA BY WITHIN This VR experience tells the story of a 12-year-old girl living in the Zaatari refugee camp in Jordan.

EMPATHY BRIDGE TOOLS FOR AUTISM, BY HEEJU KIM

FRANKLINTILL STUDIO

Design Futures / Material Futures / Colour Futures

FranklinTill Studio is a forecasting agency and creative consultancy that works with lifestyle brands across the disciplinary spectrum to provide research-based insights that drive creative innovations in materials, colour and design. It creates reports, publications, exhibitions and events with the aim of making its research both accessible and inspiring. It also edits and produces two magazines, published by View Publications, which you can buy from www.viewpoint-magazine.com.

VIEWPOINT DESIGN
Viewpoint delivers visual, editorial and statistical information to brands, designers, agencies and consumer insight teams determined to create lifestyle products, campaigns and environments that anticipate consumer demand. Written by professionals in the branding and design business, each issue explores how a significant trend will impact consumer behaviour and the global design landscape.

VIEWPOINT COLOUR
Launched December 2016, Viewpoint Colour offers visual inspiration, design direction and a global perspective on colour. The inaugural issue provides an in-depth analysis of the personality traits of emerging colour stories, explaining why they are relevant now and how they are currently being applied.

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MY DESIGN SPACE IS…

A BLEND OF OLD AND NEW

American designer, artist and engineer **Ben Tew** explains how the traditional
tools and objects that adorn his Sheffield studio help keep him grounded

W ith a studio in Sheffield's Portland Works – a former cutlery works that was built in 1879 and later converted into various workshops – Ben Tew is not short of inspiration. With neighbours that include a joiner, a blacksmith and a guitar maker, Baltimore native Tew is able to collaborate with and draw upon the work of "a fantastic collection of makers working in both old and new ways."

"My working space has a very industrial look to it," says Tew, who explains that he took over the workshop two years ago from a motorcycle builder, and so ended up with all of his old tools, materials and various motorcycle bits. "For the design of the space, I wanted to keep a bit of the old industry still visible, while bringing in the newer technology I work with," he says.

Another way in which Tew keeps the spirit of the past alive is with a reminder of his childhood: Lego (**1**). "I like to keep these guys around as I was a Lego fanatic as a child, and they remind me not to be too serious," he explains.

Other decorations in the space take the form of Tew's past professional creations, such as the pinwheel (**2**) he made while working at Jason Bruges Studio on a Dyson commercial for a Japanese audience. "It was a really fantastic opportunity to take a seemingly simple object and recreate it using high-precision manufacturing and high-finish materials," he says.

Tew uses the old pieces of machine work (**3**) that are scattered around his studio as references for the weight and texture of particular materials. "I just love having these hanging around," he says, before adding: "It's easy to get lost in the virtual space of design, and being able to handle these pieces keeps things grounded."

Tew's passion for well-crafted objects also shows in studio objects such as his "old school folding rule" (**4**), which he describes as "just a nice, well-made tool." The rule was a Christmas present from his father-in-law, who is also an engineer and shares his love for handcrafted objects and vintage tools. "It has these wonderful brass hinges that have such a satisfying movement to them," Tew enthuses.

The markers (**5**) Tew uses were also a gift, this time from his mother. "They're refillable and my go-to when doing early concept sketching," he says. "They have a lovely feel to them and I love that their square profile keeps them from rolling off my desk." ◻

1

2

3

4

5

Rosalind Freeborn is a collage artist who uses a wide variety of paper to make her art.
www.paper shades.co.uk

50 SHADES LIGHTER

Paper collage artist **Rosalind Freeborn** explains how she's making her art available beyond canvas with her new lampshade business

R osalind Freeborn spent her post-graduate art diploma painting in oils, but a fascination with paper soon took over, and she found a niche creating portraits of people in her unusual paper collage style. Recently, she's started an art-based lampshade company called Papershades, which specialises in floral designs, and operates out of her studio in London's Muswell Hill. Here, she reveals how it came about...

What gave you the idea for Papershades?
For years I looked at lampshades – my own and in other people's houses – and thought how boring they were. I wanted to find a way to make them into art, whether the light was on or off. I spent a lot of time looking at the way lampshades were constructed and decided I had to do something radical.

How did you get started?
A couple of years ago, I had a show of floral paper collages made with brightly coloured tissue paper. They sold well, but not everyone can afford this kind of art, and I didn't want to do the usual run of framed prints. That prompted me to explore ways to use these colourful pieces in a different way.

How did you go about making them?
Developing the product was the hardest part. I explored the properties of paper and realised that a stiff card or cartridge paper could be self-supporting. I then worked on finding a means of keeping the panels of paper in place. That's when the 're-invention of the wheel' happened.

How long did it take to develop this technique for making lampshades?
It took about 18 months from the initial idea to the launching of the website in December 2016. I'm not technical, nor am I a designer; I'm an artist. However, I had terrific and generous help from designers, website experts and paper manufacturers, who were kind enough to advise me on the right way to take the idea forward.

And you've been teaching it to other people in workshops too: when did that start?
The Papershades workshops coincided with the launch of the business, and have been a thrilling learning curve. All kinds of people have taken part. The glory of the technique is that you don't have to be an artist or even particularly creative to participate.

What's the biggest lesson you've learned?
I've learned that perseverance is very important, as is accepting help from experts. I'm enormously grateful for the support of all the people who helped me: the printers, the paper people, photographer and website builder.

What keeps you creatively inspired?
I see things all the time that strike me as the starting point for a collage composition. I might spot some unusual paper in a shop, pick up a discarded magazine with amazing photos or textures, have a conversation that triggers an idea, or go to a gallery and find myself intrigued by an artwork and want to know more about the piece and the artist. The ideas never stop coming! ◻

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THE AOI'S GLOBAL AWARD SCHEME IS BACK

AOI Awards manager **Sabine Reimer** explains how entering this year's World Illustration Awards could result in recognition, exposure and exciting new clients

While the Oscars is probably the best-known awards scheme in the world – its impact is felt around the globe in column inches, Twitter feeds and box office takings – there are plenty of other award ceremonies that have a significant impact for entrants and their respective industries. And the annual World Illustration Awards (WIA) is no exception.

Presented by the Association of Illustrators (AOI), in partnership with the Directory of Illustration,

the World Illustration Awards is one of the industry's largest and most esteemed award schemes. With eight categories that encompass the breadth of illustration, the catalogue of shortlisted work and accompanying touring exhibition provides a snapshot of some of the best work in illustration today.

With so many award schemes in existence, it might be difficult to see the value in entering your work, but lots of illustrators believe doing so is a worthwhile practice – even if the outcome isn't what you

hoped for. Awards raise awareness of your brand and work, give you credibility in the eyes of existing and new clients, showcase you as an ambitious professional, and provide recognition for your hard work.

Children's Book category winner Alexander T. Smith sees industry recognition as an important aspect of the WIAs. "What's special about the AOI Awards is that they're judged by the illustration industry. It's a lovely experience to feel you have the nod of approval from your peers and contemporaries," he says.

Clockwise from far left: WIA launch evening; 101 Dalmatians, by Alex T. Smith; Trump, by Florian Bayer; Nicanor Parra – 100 Years, by Diego Becas Villegas.

Winning the award has also expanded his range of work: "The big thing to come out of my award is that the projects I'm being offered or invited to work on are different from before. I will be working on [projects that] are terrifically varied. This is both challenging and really exciting, and is allowing me to really push my work in a new direction," he explains.

Research and Knowledge Communication (professional category) winner Florian Bayer agrees on the validity of the awards. "Winning the award meant a lot to me. It's great to get your work validated by an institution with such a reputation." But that validation has also caused a dilemma:

thanks to an increased number of enquiries, he's had to turn down work. "Many of the commissions were very cool, which is really great, but it's really sad when you have to say no to a project you would have loved to work on," says Bayer, who's currently illustrating a special Review of 2016 issue for Süddeutsche Zeitung Magazin while also working on his first children's book, Wild Animals In Africa With Super Powers.

Commissioners also value the awards. The AOI ensures that the shortlist – which has been vetted by the WIA jury – is promoted to a broad range of recipients, who use it to find fresh new talent. They know that an illustrator who enters

the WIAs is serious about their work. It's a great place to find the next illustration superstar.

As illustration courses burgeon and the number of practitioners reaches an all-time high, awards are an increasingly important way to set yourself apart and be noticed. Just like at the Oscars, winning a WIA translates into career development and a raised profile. ◻

To find out more and enter the WIAs, visit: www.theaoi.com.

The AOI is the UK's leading illustration body. It strives to promote, empower and advance the illustration industry. www.theaoi.com

Eleanor Shakespeare

Photomontage illustrator Eleanor Shakespeare works for a range of clients and contexts and mostly uses Instagram to post pictures of her work – either in progress, in her sketchbook or in print. "The last one is especially important because so much illustration is seen online and sometimes it's helpful to see it in its print context," she notes.

Believing that people want to see behind the scenes of a designer's life as well as their work, Shakespeare also posts snippets of her South London home or her travels; anything she finds beautiful. "If I admire the work of a certain illustrator, the chances are I want to know more about what inspires them, where they live and what they get up to," she says.

Shakespeare also uses the platform as a more sociable, less formal way of communicating and building relationships with clients, designers and art directors. "I've got jobs through Instagram and even landed an agent because of my feed. If my website is the polished, refined, leather-bound portfolio, Instagram is my sketchbook," she explains.

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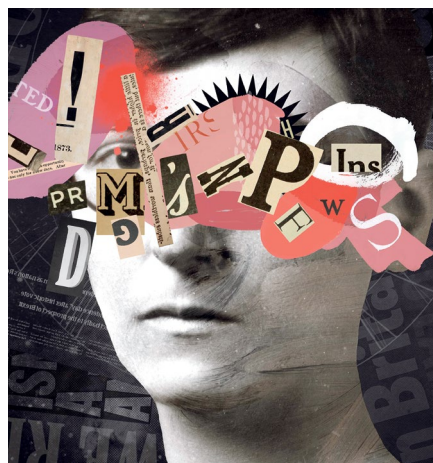
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INSIGHT

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ADRIAN SHAUGHNESSY
GRAPHIC DESIGNER
AND WRITER
www.unitededitions.com

Adrian Shaughnessy is a graphic designer and writer. In 1989, he co-founded design company Intro. Today, he runs ShaughnessyWorks and is also founding partner of Unit Editions, producing books on design and visual culture.

ZENA BRUGES
FOUNDER,
THE BUSINESS SIDE
www.thebusinessside.co

After many years managing creative businesses, Zena founded The Business Side, "a company to help with the things that keep you awake at night."

**Illustrations:
Louise Pomeroy**
www.louisezpomeroy.com

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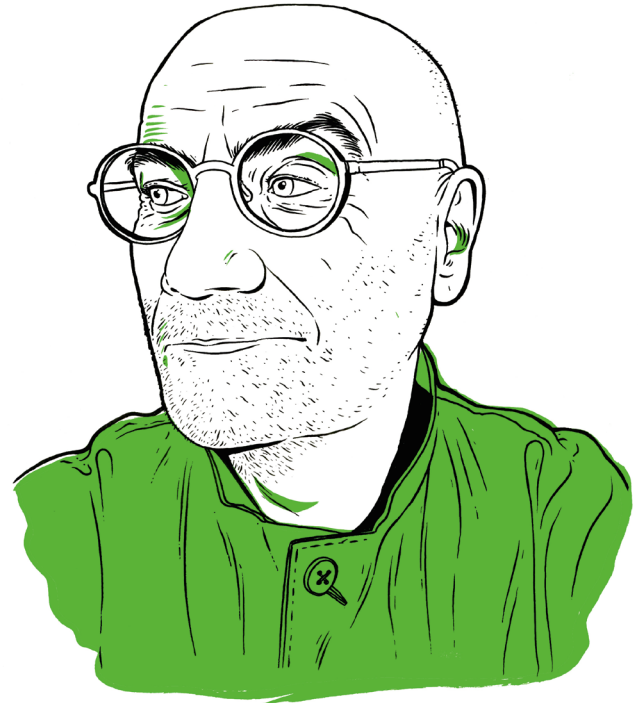
Will we all be replaced by robots?

Adrian Shaughnessy discusses how automated processes could threaten the role of the designer

During my time as a graphic designer, I've experienced nearly everything – short of physical violence – that working life can throw at you: recessions, legal disputes, defaulting clients, and of course, the thrill that comes with completing a successful project.

But two events – both of which turned the practice of graphic design on its head – stand out as life changing. The first was the arrival of the Macintosh computer. For all practising designers at the time, computerisation necessitated an extensive rethink of the craft: no more mechanical artwork, no more paste-up, no more typesetters, no more expensive retouchers, and many of the tasks previously done by repro houses were taken over by designers sitting in front of computer screens. It was the beginning of a new age of digital self-reliance and a period of massive reorientation.

The second event was the arrival of the internet. Here was a new way of thinking about, and making design: suddenly, designers no longer had complete control over how their work was received. The inability to control browser use, screen ratios and fonts had a decisive impact and old rules such as the number of characters per line length rule became redundant. Even the users themselves could mess with the appearance in ways unthinkable to designers trained in print design, where layouts were fixed once they left the designer's hand.

These two events threatened to shrink the role of the designer, but the opposite happened. There are now more graphic designers and students than ever before. Design is a global industry embedded in, and inseparable from, business and culture. For many, graphic design is as much a lifestyle choice as a career choice. We do it because we love it.

A STORM BREWING
If design and designers can be said to have benefited from these two shocks in the long run, there are concerns that the craft and the profession might not survive quite so well. Is design about to meet its Uber moment? Is AI about to take on the role of the designer? Is the surge towards a fully automated world without work about to engulf design?

It might seem that automating the design process is impossible. You might assume that the creative imagination is the least likely arena to be taken over by machines, that bots are for routine production, not conceptual thinking. In reality, the process is already underway. Social media has usurped many of the roles previously done by designers. You can start a business with a Facebook page (or as one expert calls them "Facebook pages … the new small-business homepage"). For many, access to a Twitter or Instagram account is all the design they need.

The automation of countless realms of everyday life is already at an advanced level: entire factories are operated by robots; legal contracts and stock market trading are routinely done by bots; automated warehouses, ATMs, and user operated supermarket tills mean fewer jobs in industries once regarded as high volume employers; driverless vehicles signal the end for the millions of people who drive for a living. Why should design be any different?

In the book, Inventing the Future (Postcapitalism and a World Without Work), Nick Srnicek and Alex Williams state that: "anything from 47 to 80 per cent of jobs are likely to be automatable in the next two decades." They also note that the "roboticisation of services is now gathering steam, with over 150,000 professional service robots sold in the past 15 years. Under particular threat have been routine jobs – jobs that can be codified into a series of steps."

Surely this lets design off the hook? We can't expect machines to make the irrational, gravity-defying leaps of imagination that designers make, can we? What about the designer's ability to capitalise on accidents and unforeseen coincidences? Surely this sort of cognition is beyond the bot?

Not so. We live under the dictum that anything that can be automated will be automated. And nowhere in the design world is this idea more advanced than in web design. In a post titled Why Web Design is Dead, on the website UX Magazine, designer Sergio Nouvel notes: "Most of the content you see on the web today is run by some framework or service – WordPress, Blogger, Drupal, you name it. Frameworks provide you a foundation and shortcuts so you spend less time struggling with the creation of a website, and more time creating content. As a consequence of the ubiquity of these frameworks, a world of free and paid templates lets you start with a professional-looking design in minutes. Why hire a web designer if you can achieve a fairly acceptable design for a fraction of the cost using a template?"

The automation of design is underway. Social media has already usurped many of a designer's previous roles

AUTOMATION IS HERE
The Grid, a San Francisco and Berlin-based start-up, was the first to announce that it has created a website builder that uses artificial intelligence. It enables users to upload images and text or make use of its library of colour combinations and images, and then, using AI, it performs all the key design functions: positioning of images, placement of text, selecting colours and sculpting a unique, customised website. The Grid says it doesn't use templates, but 'layout systems', which it claims offers greater flexibility.

With The Grid, if you don't like what you see, you hit the Redesign button and in seconds a different layout appears. The Grid's promotional video gives the impression of effortless, nearly instant success. It's a seductive pitch. But not everyone is impressed. ▶

Various webinars offer a less convincing glimpse into The Grid's AI approach to web design. Watching these critical takedowns, I was reminded of the early days of DTP design – gap-toothed typography and bitmapped images. But the painful DTP birthing phase didn't last long. Designers mastered the software, the software improved, and so did computing power. You wouldn't lose money betting on AI websites becoming much better in the future.

It's easy to see why clients would be attracted to this grit-free process. There's no more time spent listening to pesky designers defending their design decisions, no more waiting around for new designs to arrive. And here's the clincher: no more redesign fees. Instead, clients inhabit a fragrant world of endless iteration and seemingly limitless choice.

The Grid is not alone in its quest. In September 2016, the website Tech Crunch reported that Canva, a design platform for web and mobile, had announced a new infusion of $15 million in funding and a doubling of its valuation in 12 months. This added capital was reported to have brought Canva's valuation up to a whopping $345 million.

What makes Canva so attractive to the guys with the money is the fact that it can be used by non-designers. Canva claims it only takes 23 seconds to become a proficient user of its software. Ten million people are allegedly using it to design business cards, posters, presentations, and graphics for social media.

Looking at the formulaic design featured on the site, it's hard to take seriously claims that 'anyone can become a designer' with Canva. It's easy to laugh at some of the work these sites post as examples – most of it looks as if it has been designed by someone on autopilot. But will we be mocking in five years' time? When we look at what is happening in AI, it seems foolish to dismiss attempts to automate design.

AI-DRIVEN DESIGN

When I talk to designers about the likelihood of AI taking over the tasks of designers, I'm met with scepticism. But this strikes me as short-sighted. In a detailed account of Google's work in AI, published in the New York Times Magazine, the journalist Gideon Lewis-Kraus writes about the company's use of artificial intelligence to transform Google Translate. Anyone who has used the translation service will know that its results are hit and miss, always require correction, and are rarely idiomatically correct.

All that is changing. In its new AI-driven version, Google Translate is producing astonishing results. Developed by the Google Brain team, 'artificial neural networks' (much like those in our skulls) are offering an alternative to traditional computer programming and represent a move towards self-learning machines. Using these networks, robots can then acquaint themselves with the world via trial and error in the same way that children do, giving machines "something like human flexibility."

Lewis-Kraus reminds us of Alan Turing's famous test for an artificial general intelligence: "A computer that could, over the course of five minutes of text exchange, successfully deceive a real human interlocutor. Once a machine can translate fluently between two natural languages, the foundation has been laid for a machine that might one day 'understand' human language well enough to engage in plausible conversation."

If Google's new translation service is close to fulfilling Turing's criterion, then it's not much of a stretch to imagine AI tackling more sophisticated design problems than shifting elements around on a webpage. Most of the everyday design we encounter can be broken down into a simple set of principles that can be codified, and it seems highly probable that a machine can learn the rules of typography, the golden ratio and the rule of three. And it's no gamble to assume that cost-culling businesses will latch onto the money saving benefits of AI design.

What should designers do? AI driven design already has the potential to remove some, or most of the production based tasks that designers do. Need 100 web banners for a global ad campaign, all with different information and numerous different languages? No problem. Robots capable of handling such routine tasks will result in fewer design production people.

But will the sharp end of design be affected? Eventually, yes, and just as human beings have learned to do since the introduction of industrialisation, we must adapt. It's my belief that designers are well equipped to do this. Teaching flexibility and a willingness to learn may be the biggest challenge facing the world's design schools.

Of course, this doesn't only apply to design. In the information age, we may be looking at a world without paid work. This takes us into the political realm, and subjects that governments are avoiding. It poses questions such as adopting a basic income, and the relearning that will be needed when the post-industrial world is replaced by one of unlimited leisure. These topics are discussed in academia and future-gazing think tanks, but we all need to be thinking about them sooner rather than later.

Halfway through writing this, I had a sudden, sobering glimpse into a machine-driven world. My five-year-old iMac died. The screen went black, none of the usual remedies helped and it was Christmas, so there was no chance of emergency repairs. It was a personal mini-disaster. But this is what happens to machines: they break. Perhaps their fallibility is the only thing between us and an AI future. ◻

Could a machine do your job? Tweet your thoughts to @ComputerArts using #DesignMatters

> *Most of the everyday design we encounter can be broken down into a set of principles that can be codified*

Are you excited about the potential of working with VR? Or is it just the latest fad?

NIKLAS LINDSTROM
Head of interactive production
Droga5
www.droga5.co.uk

○

"I am truly excited about the potential of this medium. We have a long way to go, but that's exciting. We tend to apply old truths to something new, and that's why the focus has mostly been around VR as a new way to tell stories. For me, the real potential of VR is to make people feel truly immersed in experiences they wouldn't otherwise have, so the focus should more be about influencing and enhancing people's emotions and interactions in the experience than delivering a certain story. The user creates their own story, and so becomes the storyteller."

DUAN EVANS
Executive creative director
AKQA
www.akqa.com

○

"We're already seeing virtual reality used by doctors, sports coaches and educators because of the real benefits it brings. VR is here to stay, it's only going to get more sophisticated and immersive. Although gaming and entertainment are currently the primary uses, the positive impact VR can bring is incredibly exciting."

ALEX DONNE-JOHNSON
Creative director
Dazzleship
www.dazzleship.com

○

"For anyone working in motion, I feel this is an exciting area. VR is either rendered (360 video) or real-time, leaving most motion designers only able to create rendered video. The community is rapidly shifting towards GPU rendering, specifically things like Octane by Otoy, who have made various developments with VR and Oculus. Combine this with Nvidia's increasing GPU power, and it seems that motion designers should shift into VR as producing real-time VR becomes more likely. It's an exciting medium, but it still needs more time to mature."

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f   f   f   f   🐦

MICHAEL WOODRUFF
VR is a great and novel way of addressing a lot of the problems other storytelling formats struggle with.

CHRIS MARTY WEAVER
In years to come, VR will potentially revolutionise education and how history and science are taught. Unlike 3D film, I feel VR is more than the latest fad.

SAVVAS DEMETRIOU
Virtual reality is good to experiment with, but needs to evolve further before it can be applied to arts, advertising or design.
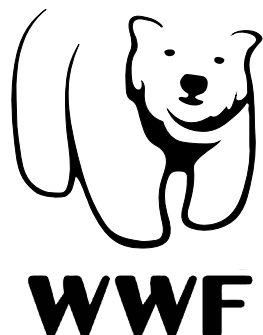
LEN MASSAAR
Unless and until VR devices are affordable, and truly cross-platform, VR is unlikely to unleash its true long-term potential.

@JACOBLEEDESIGN
VR will be massive for events and product launches before it's refined for use at home. The possibilities are exciting.

REBRAND FOCUS

Focus on: Grey London's speculative WWF rebrand

WWF may or may not take Grey London's speculative rebrand on board, but the agency has made it available for free just in case. Here are three perspectives on the work…

WIKTOR SKOOG
Strategic design director, Grey London
www.grey.com/london

KENNY LOPEZ
UX designer,
Atom Design Agency
www.atomagency.co

JO GULLIVER
Art editor, Computer Arts
computerarts
.creativebloq.com

"WWF's logo is the most iconic in conservation. When it was designed in 1961, giant pandas were one of the world's most endangered species, and climate change wasn't yet a going concern. However, fast forward 55 years and the giant panda is no longer endangered, while climate change is the single biggest threat to all wildlife. We wanted to highlight (and get people talking about) this by designing a logo that symbolised not just one species, but all of them. And what better symbol than the polar bear – an animal whose habitat is literally melting away from beneath its feet, and one that has become the unwitting poster boy for the phenomenon that could one day wipe out the entire species. We offer our polar bear – as well as an entire corporate identity rebrand – to WWF free of charge."

"I think the idea of WWF celebrating that the panda bear is no longer endangered, and bringing attention to a new species in need, is great. I only wonder how this new logo scales when applying to smaller print or digital media. The abundance of white space, combined with three small black dots for the eyes and nose, may not be enough to keep the brand recognisable at a quick glance."

"We see a lot of speculative rebrands on Computer Arts. Some are an attempt to beef up a thin portfolio with something more 'big brand'; some are in direct response to student briefs from brands via the likes of D&AD New Blood; and some, like Grey's work for WWF, are about making a statement – in this case, about endangered species. Responding to the fact that the giant panda featured in WWF's iconic logo is no longer technically endangered, the agency has offered this alternative. It's a really commendable exercise, but practically speaking, the amount of negative space makes the marque challenging to use at small sizes. And while the new concept is more factually accurate, it's at the expense of brand recognition and heritage – a difficult trade-off for any global brand."

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OXFAM

COLUMN

How to hire interns

Creative business consultant **Zena Bruges** shares common errors employers make when hiring interns

For any creative business, interns are a great way to inject new ideas and talent into the business. And for the young and aspiring, being an intern is the perfect way to get some real-life work experience. Plus, let's face it, it's where many of us started out.

But there are some pitfalls to hiring interns, and as a small or large employer, the last thing you want to do is earn bad press by hiring someone and failing to treat them properly, either financially or operationally. Getting a reputation for taking advantage of interns could reflect badly on your image as an employer and as a business, meaning candidates may be less attracted to the company, and clients may in turn be deterred from buying from you in the future.

So, to make sure you follow best practice and stay on the right side of the law, I've outlined the four pitfalls to avoid when taking on an intern:

1. Get the financial facts

Don't assume that all internships are unpaid. In fact, according to employment legislation, there are just four types of internship that can be unpaid: student internships for less than one year, school work experience placements for the under 16s, voluntary work for a charity, or work shadowing an employee where no real work is carried out. Unless your internship falls under one of these categories, it needs to be paid.

2. Minimum money

Failing to pay your intern the minimum wage is another common error. Wage rates change every year and so, of course, does your intern's age, so it makes sense to check rates yearly and pay your intern appropriately. If you fail to do so, you could face hefty fines or even end up in court, and of course, risk damaging your reputation.

3. Know the law

You might think that employment legislation doesn't apply to an intern, but once an intern starts doing paid work for an employer, they may qualify as an employee and therefore be eligible for the same protection.

4. Don't settle for second best

Another common error is just accepting the first person who applies for the role. You have every right to be picky when taking on an intern, whether they are paid or unpaid. Don't accept them if they are not up to standard, and make sure you interview and select the most motivated and deserving candidate as you would a normal role.

Avoid making these errors and who knows, your next intern might just end up becoming your star employee. ◻

What's your experience of hiring interns? Do you agree with Zena's advice? Tweet your thoughts to @ComputerArts using #DesignMatters

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TWO SIDES

SHOWCASE

Computer Arts selects the hottest new
design, illustration and motion work
from the global design scene

FIERY PHILANTHROPY

RED HOT IDENTITY
by The Collected Works
www.thecollectedworks.com

Red Hot is a not-for-profit organisation dedicated to
fighting HIV and AIDS through pop culture. Over
the past 25 years, over 500 artists, producers and
directors have contributed to 20 compilation albums
of original music, videos, events and media. This has
furthered the conversation about the AIDS epidemic
and raised millions of dollars for organisations
around the world. "Red Hot has an incredibly rich
and interesting history. However, as it was never
properly documented, it was at risk of being lost,"
explains Justin Colt, partner at The Collected Works,
the agency which refreshed Red Hot's identity
and created a new digital archive of the charity's
projects. As the projects were so diverse, the high
contrast black, white and red colour palette became
a unifying element, spanning the timeline of Red Hot.
"The juxtaposition of old and new design elements
creates a visual vocabulary that feels both familiar and
unique, which is great, as that's been the persistent
mission of Red Hot since the beginning," says Jose
Fresneda, partner at The Collected Works.

Red Hot + Riot:
The music + spirit
of Fela Kuti
-
2002

Red Hot + Dance
-
1992
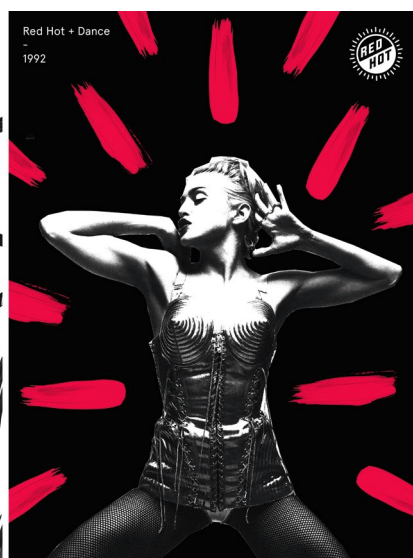
OVER THE PAST **25 YEARS**, OVER **500 ARTISTS**, PRODUCERS AND DIRECTORS HAVE CONTRIBUTED TO **20 COMPILATION ALBUMS** OF ORIGINAL MUSIC, VIDEOS, EVENTS AND MEDIA.

Stolen Moments
-
Red Hot + Cool
-
1994

A Tribute to Cole Porter
-
Red Hot + Blue
1990

🖼 **IMAGE GALLERY**
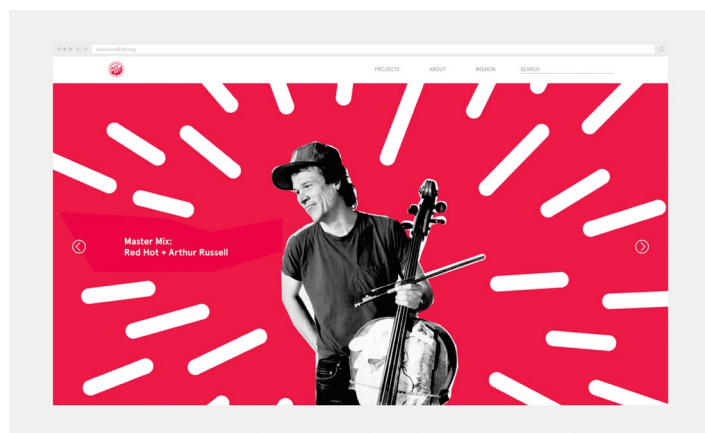
A poster featuring Charlie Parker for Red Hot's Offbeat project, which included a one-hour documentary about the Beat Generation and a companion CD; some of the patterns of the new identity.

Posters featuring Fela Kuti and Madonna. Kuti was the subject of two Red Hot projects (Red Hot + Riot and Red Hot + Fela) and Madonna featured on Red Hot's second release (Red Hot + Dance).

Posters of Pharoah Sanders for Stolen Moments: Red Hot + Cool, and Cole Porter for Red Hot + Blue, the first ever Red Hot project, released in 1990.

Sample spreads of a zine detailing the history of Red Hot as a celebration of its 25th year. Printed on Risograph and sent to friends and partners.

The Red Hot logo that was originally created by Ryan Feerer. Instead of changing it as part of the rebranding process, The Collected Works embraced it, and animated it in the new style.

Sample screens of the Red Hot website – an archive that details the history of the organisation and where visitors can learn about and listen to all of Red Hot's projects.

—
LOGO DESIGN

DOCTORS ORDERS

—
FONTS

NB ARCHITEKT NEUE — LIGHT

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789

▨ THE RIGHT PRESCRIPTION

DOCTORS ORDERS
by Saxon Campbell
www.saxoncampbell.com

When Saxon Campbell went to the doctor complaining about a cough, he was given the choice of taking a prescription syrup or trying some natural alternatives. As the doctor stated that the two options often have the same result, the art director and founder of his eponymous studio Saxon Campbell started researching natural remedies, and decided to design his own products. "I wanted the name to be easy and fun," says Campbell, who then turned his attention to fonts and colour schemes. "Some of the typography inspiration came from scientific journals I researched," he explains, "and for the colours, I wanted to create unity from the ingredients in the medicine." Campbell also drew upon the product's ingredients in the photoshoot: "It's my favourite part of the finished piece, it really sells the idea," he states.
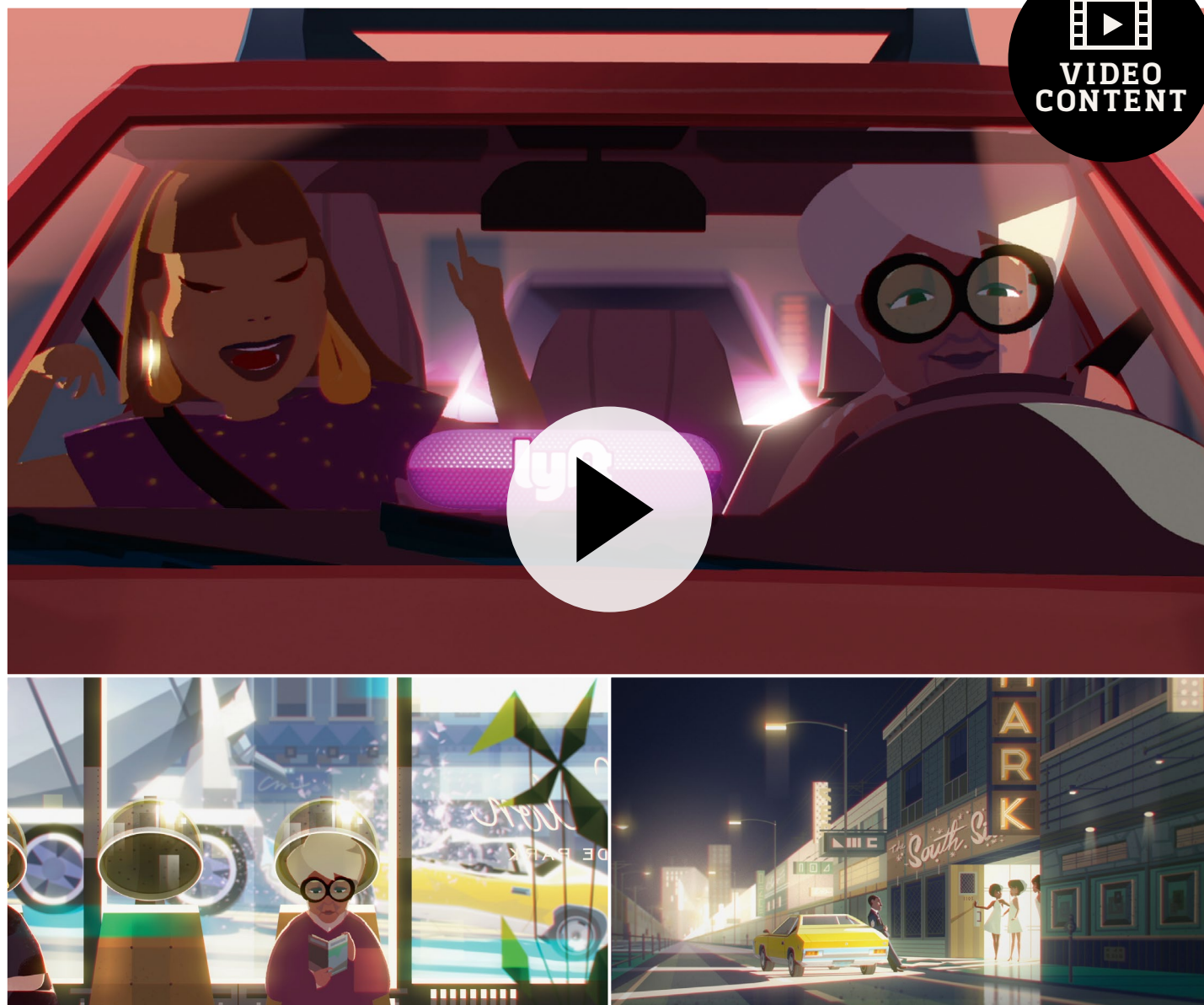
LIFTING SPIRITS

JUNE
by Lyft with John Kahrs
www.lyft.com

A new animated short, directed by John Kahrs for lift-sharing platform, Lyft, tells the story of a widow who starts using the app to get out more and become part of her community. "The film was inspired by the Lyft drivers and passengers who make it more than going from A to B," says Ricardo Viramintes, creative director at Lyft. "Countless stories and relationships have been created in Lyft rides, and we wanted to find an emotive way to describe the community that Lyft has facilitated." The team behind the film were careful to strike the right balance so they could showcase Lyft without going overboard, and the short has been received positively by Lyft drivers. "We went to great lengths to make sure we captured their experiences in as real a way as possible," says Viramintes.

🖾 UGLY AS SIN

SINNER TYPEFACE
by Frame Creative
www.framecreative.com.au

Frame Creative designed brutal, neo-classic new typeface Sinner for the third issue of Australian publication Krass Journal. "The brief was to delineate the biting and audacious content," explains Simon Pearce, creative director at Frame. "I set out to create something almost ugly in reflection of some of the uncomfortable topics inside the issue."

Pearce constructed the letters from a strict grid base and system of shapes, referencing type master Gareth Hague's fonts Harbour and Text, as well as a series of ancient Arabic calligraphic styles and historic Germanic and blackletter letterforms. Sharp 45-degree angles add a harshness to the design, while varying ligatures provide diversity in the layout. "Sinner is designed to work at poster and headline sizes for a bold impact," adds Pearce.

The ARC of FIC—TION:

SIRI HUSTVEDT on FORM, CAUSE, and DINNER PARTIES WITH IDIOTS.

55

BIG, BOLD WOMEN: STEP—PING FORWARD WITH SAMPA THE GREAT

Poetry is just the evidence of life. If your life is burning well, poetry is just the ash.
—Leonard Cohen

89
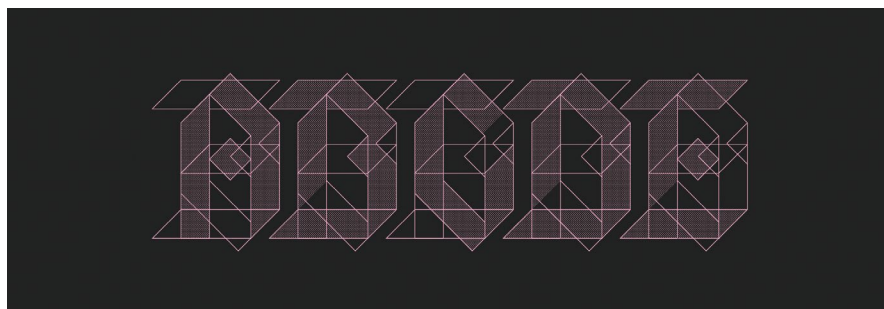
⬚ NAUTICAL BUT NICE

DE LA MER IDENTITY
by Gladstone Media
www.gladstonemedia.ca

With a focus on organic, sustainably caught and farmed fresh fish and seafood, boutique seafood shop De La Mer needed its brand to feel authentic and timeless, as if it had long been part of the neighbouring community of local, family-owned businesses. "We researched the sustainable fishing industry and the overall aesthetics of aspirational shops around the world," says Jeremy Gladstone, creative director at Gladstone Media. "As a result, we chose to make custom typography a large part of the installations for the purposes of brand messaging and aesthetic appeal." The use of custom vintage-style typography, hand-lettered cursive, etched wood, and an eclectic mix of found objects with a nautical feel gives the brand an organic, homegrown aesthetic that sets it apart from its competitors, while the main floor installation of grey hexagonal tiles are reminiscent of fish scales, a touch which adds to the modern, nautical look.

◩ SOMETHING NEW

SOMEONE SOMEWHERE
by Sociedad Anónima
www.sociedadanonima.mx

Flor de Mayo wanted to use traditional Mexican textile designs in everyday garments and accessories, giving credit to the artisans and their heritage, and so tasked Sociedad Anónima with developing a suitable graphic identity and new name. "The name had to be short but strong, and refer to the main purpose of the company," says Rodrigo Tovar, founder and partner at Sociedad Anónima. "Someone Somewhere was meaningful and allowed us to 'play' with it graphically." Although some aspects of the project were challenging, such as ensuring the logotype included sufficient space to credit the people and places where the garments were made, Sociedad Anónima was pleased with the final result: "We love the fact that with very simple elements, the final result is strong and works harmoniously with traditional textiles," states Tovar.
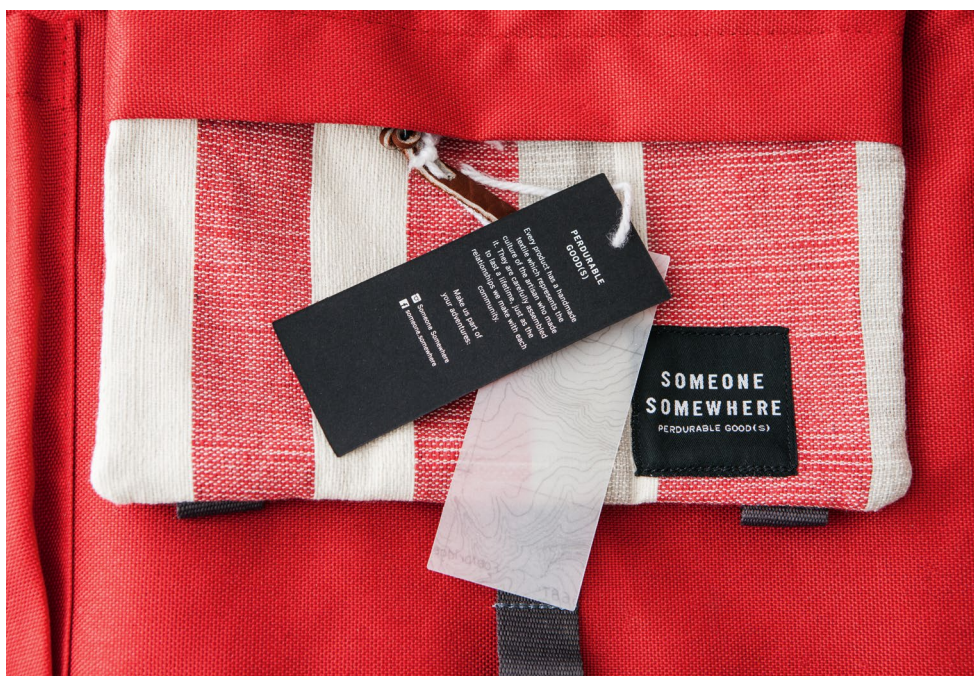
🖼 BEAUTY QUEENS

THE FEMALE FORM
by Amber Vittoria
www.ambervittoria.com

A continuous personal project, The Female Form addresses ideas of femininity and aims to break the notion of an 'ideal physical female.' Illustrator Amber Vittoria was inspired to create the series after watching her teenage cousin send selfies on Snapchat as she simultaneously stated how ugly she felt she looked. "She wanted thinner eyebrows, straighter hair, shaved legs and more make-up," says Vittoria, adding that the project aims to "accentuate the beauty in variety and individuality to combat this negative self reflection." Although Vittoria says the most challenging aspect of the work has been to focus on just one aspect of womanhood in each piece, she is amazed at how her work has been received, saying: "It has resonated with and impacted people I may never get to meet in person, and that has been the most wonderful output."

▨ MELODIC MOVEMENT

EUPHONICA REBRAND
by EACH
www.eachlondon.com

Briefed to rename and rebrand well-known event music business Stag Music, London-based graphic design and branding agency EACH set about defining a brand proposition that would reflect the company's elevated client list, and carve it a place above its competition. The new name, Euphonica, references the word 'euphony' – the quality of being pleasing to the ear – and with this approved, EACH then went on to produce a rich and compelling visual world.

Inspiration for the Euphonica symbol came from the client's wish to move and immerse its audiences in event experiences. "The marque abstractly expresses that sense of sonic immersion in performance, or more literally alludes to the performer and audience," explains EACH's creative director Tom Munckton. "It's also derived from the name's 'E' letterform. We've loved watching how empowered the team feel now they have a brand that can guide them into ever more interesting and exciting places," he adds.

Buster the Boxer VR (adam&eveDDB and MPC Creative for John Lewis).

Jaguar's I-PACE launch (REWIND and Imagination).

Fantastic Beasts & Where to Find Them VR (Framestore for Warner Bros).

Hidden Cities: Dublin (Visualise for The Financial Times).

Young Conker (Asobo Studios for Microsoft HoloLens).

HoloTour (Asobo Studios for Microsoft HoloLens).

VR: THE FUTURE OF DESIGN?

As VR goes mainstream, **Laura Snoad** examines how creatives can harness the medium to make meaningful experiences that captivate users

Jaguar's I-PACE launch (REWIND and Imagination).

The final months of 2016 were a hive of activity in the world of VR. Following launches of the Facebook-owned Oculus Rift and HTC Vive in the spring, PlayStation VR unveiled its eponymous headset in October, Samsung Gear VR got an upgrade, and Google's Daydream View hit the shelves. What's more, in the final days of November, Microsoft announced that its HoloLens – an industry redefining self-contained wearable that intelligently reads the user's environment and overlays it with 3D holograms – was finally available for developers, with a consumer launch expected some time in 2017. If 2016 was a watershed moment in terms of the tech, then 2017 is when we'll see the creative potential fully erupt.

For creatives working in branding and advertising, the possibilities of VR are sure to get pulses racing. Not only do VR, AR and MR (mixed reality – the term Microsoft uses to describe its HoloLens environment) offer an unparalleled opportunity to provide customers with exciting rare or impossible experiences, or educate them about a product or service in a distraction-free 3D environment, but studies have shown that viewers' feelings of engagement and empathy are much higher in immersive VR environments than when watching a standard 2D film campaign. On top of this, there's huge PR potential because of the relative novelty of the form. But working in such new, unexplored territory requires quite the mental shift. Because of the viewer's autonomy, the average approach to brand storytelling will wither and die in virtual reality. Plus, it's expensive. "Just because you can, doesn't mean you should," points out Sol Rogers, founder of virtual reality agency REWIND. A VR experience, he argues, must offer something valuable that justifies the medium. "Always ask why a piece should be in VR, and why it couldn't just be a TV show or an app. Think about the consumer first, and don't be seduced by the technology."

> "ALWAYS ASK WHY A PIECE SHOULD BE IN VR, AND WHY IT COULDN'T BE JUST A TV SHOW OR AN APP. THINK ABOUT THE CONSUMER FIRST, AND DON'T BE SEDUCED BY THE TECHNOLOGY"

DIFFERENT REALITIES

VR experiences can be roughly broken down into three categories: active, semi-active and passive. Active VR does what it says on the tin: the viewer can interact with the environment, whether they are solving puzzles, killing baddies, drawing or flying. A 360° video with hotspots where the user can choose to follow a specific character or unlock the next part of the experience is considered semi-active, while passive VR is used to describe 360° video where the viewer can turn their head to watch the action unfold at any compass point, but cannot influence what unfolds in front of them.

Knowing what you want to create, and who you want to create it for will have a massive impact on the platform you choose to design for. At the top of the chain, there's room-scale real-time engine VR – all singing, all dancing VR platforms that work by hooking up a headset to a game engine, for example the HTC Vive, Oculus Rift and PlayStation VR. It's here that interactive, processing-hungry experiences work best. The next layer down is mobile VR – that's platforms such as Samsung Gear VR, Google Daydream and Google Cardboard, which work by slotting a phone into a headset (or in Cardboard's case, a cheap cardboard viewer) and using the phone to boot the experience, without the need for wires.

Interactive content can work here, but with much less power, and it's mobile VR where 360° video is best used and produced. The bottom of the ladder – but not an area to be overlooked – is virtual reality outside of the headset, for example Facebook360 and YouTube360. Here, users can explore a 360° environment on their phones, tablets or desktops without owning a headset. "You can go upstream very easily, but downstream is very difficult," states Rogers. "If you make a beautiful thing for HTC Vive, it's a huge amount of pain to retool it for mobile platforms, and the same again to transform that into 360 video° – you will end up with several different workstreams," he explains. ❯

THE FUTURE OF VR

THREE EXPERTS PREDICT WHAT'S NEXT FOR THIS INNOVATIVE INDUSTRY

● JONATHAN OPENSHAW
EDITORIAL DIRECTOR, THE FUTURE LABORATORY

"What really excites us about AR and VR is their impact on human behaviour and empathy online. We've learnt from 2016 that rather than bringing us closer, digital culture has created a radically divided and dislocated world. Social media has become anti-social, creating an echo chamber of opinions and outrage that has little basis in the real world, but holds the power to radically disrupt our culture, society and politics.

VR can jolt you out of this superficial engagement and create a much deeper connection with human stories. If we look at the way The New York Times used VR to cover the refugee crisis in 2016, or how the Guardian used the medium to delivering hard-hitting editorial about solitary confinement in prisons, we can start to understand VR's true potency. The last year feels like a tipping point in the attention economy, built on the ethos of 'whoever shouts the loudest wins', so perhaps VR can help create deeper moments of pause and focus."

● ANDY HOOD
HEAD OF EMERGING TECHNOLOGIES, AKQA

"The VR industry is still in its infancy, but even now, the opportunities it holds could shift the world of work as we know it. For those of us in branding and advertising, one of the key things that VR offers is access to environments and objects that could help us deliver more creative work for clients, and more compelling experiences for their audiences.

VR technology could really challenge and realise the elements we want to deliver that ordinarily would have been too expensive, physically impossible or simply too far away to conceptualise. From a retail branding point of view, VR could enable daring designs, product exploration and brand customisation to name but a few – all of which could be created through the lenses of technology before being fully implemented. This will evolve over time, but even in its earliest days of discovery and experimentation, VR could be an enabler that will take our industry to levels of creativity that have never even been imagined."

● LEILA MARTINE
DIRECTOR OF NEW DEVICES, MICROSOFT UK

"In 2017, we expect to see mixed reality bring profound, new experiences and capabilities to both consumers and businesses. Since launching HoloLens to developers in March 2016, we've begun to see some phenomenal examples of what's possible. HoloLens aided NASA in its design of the Mars Rover 2020, supporting both its astronauts on the International Space Station and its geologists. Case Western Reserve University is transforming the way anatomy is taught to the next generation of doctors, and Trimble is helping the AEC (architect, engineer and construction) industry bring 3D models to life as full-scale holograms, and creating new ways to collaborate across the globe.

In 2017, you'll also see Windows 10 Mixed Reality holographic devices introduced via our OEM partners. The huge explosion in VR has magnified the types of experiences businesses and consumers are now able to consume, but we feel that mixed reality will drive the next phase of this phenomenon."

ALTERNATE REALITIES
WHAT YOU NEED TO KNOW ABOUT THE TOP VR HARDWARE

BEST FOR MIXED REALITY

● **MICROSOFT HOLOLENS**

The first untethered holographic computer, HoloLens overlays different CG elements onto the transparent screen in front of each eye to create real-looking 3D holograms. HoloLens is perfect for experiences that benefit from mixing the real world with the virtual – from seeing how a chair would look in your living room to highly empathetic social experiences such as meeting a hero or figure from the news.

HoloLens can also really read a room, from what an object is to what material it's made from – it features 12 sensors including four environment-understanding cameras and four microphones, and includes spatial sound, gaze tracking, gesture input and voice support.

The slick headpiece is only available to developers at the moment, and has a substantial price tag of £2,700.

BEST FOR INTERACTIVE EXPERIENCES
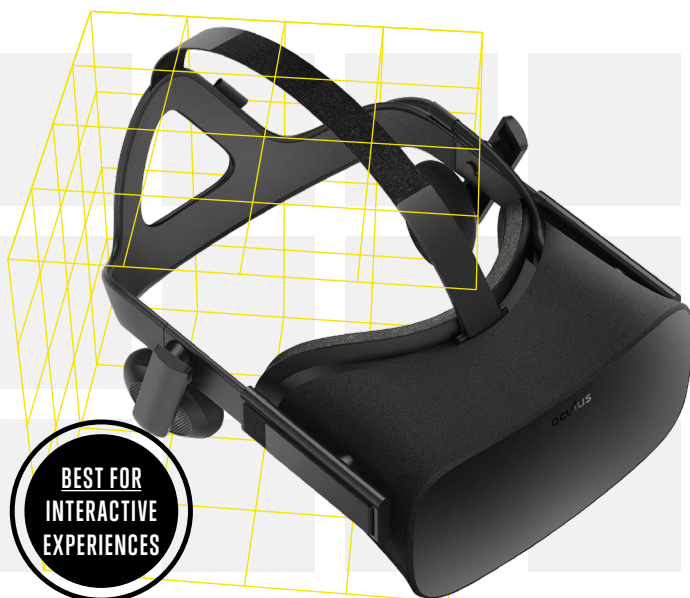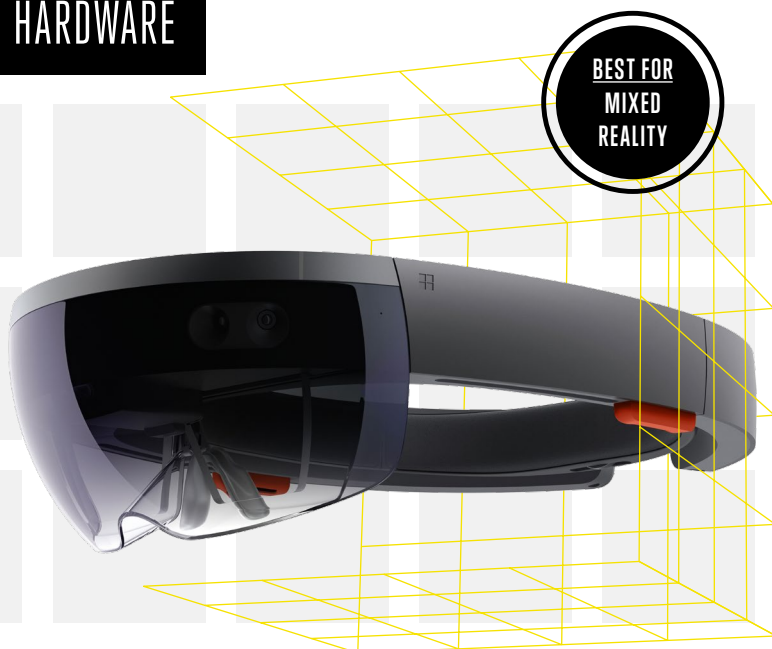
● **OCULUS RIFT**

The Oculus Rift requires a wired connection to a high-spec (and often very expensive) gaming PC, running Windows 7 or higher, but the payoff is the ability to create processing-heavy interactive experiences and games. When it first launched, the Rift couldn't do room-scale VR (so users had to sit, or stand still), but the recent addition of an additional low-latency constellation tracking system means users can now walk around – just be aware, not all users will have this capability. The same applies to the newly launched Touch controllers, which can be purchased to add greater interactivity.

The Rift's integrated VR audio system is excellent, and is widely considered better than its competitor, the HTC Vive. Price: £550.

● **HTC VIVE**

Much like the Oculus Rift, the HTC Vive needs to be tethered to a powerful desktop GPU – but the result is the ability to create immersive, active VR. One huge benefit is the ability to move around space (a minimum of 2x1.5m is recommended by HTC) – it works by using two sensors positioned in the corner of the room that track the whereabouts of the headset by sweeping with lasers.

The Vive comes with two handheld controllers, meaning greater capability for menus, navigation and gesture recognition – and the headset also sports a front-facing camera, giving designers the ability to build the real world into games or experiences. Price: £760.

BEST FOR ROOM-WIDE VR

● PLAYSTATION VR

A more affordable option than the HTC Vive or Oculus Rift, PlayStation VR is tethered to a PS4 rather than an expensive PC gaming rig, but the downside is less power, and so potentially, less immersion.

The PlayStation Camera tracks nine light points on the headset so room-scale VR is technically possible, but as Sony has opted for one sensor instead of two, the tracking is not as good as on the HTC Vive.

Although, at present, PlayStation VR content is more gaming-focused, the headset's huge sales figures (745,000 units since its launch in October – well ahead of the HTC Vive and Oculus Rift) makes it a serious proposition for the mass market. Price: £350.

BEST FOR
MASS
MARKET VR

BEST FOR
PASSIVE VR

● SAMSUNG GEAR VR 2

Powered using Samsung Galaxy smartphones, Samsung Gear VR effectively splits the phone screen in two to create 3D visuals, making it affordable, wire-free virtual reality.

Lacking the power of a high-spec PC, Gear VR is a natural home for 360° video (passive content) or semi-active experiences that require moving the head to hotspots, rather than hugely interactive projects.

Originally launched in 2013, the Gear VR is the go-to VR platform for many – it's largely understood by the public and a large number of experiences already exist for it. This has been widened by a partnership with Facebook, bringing the Oculus VR store to the platform.

A recent upgrade to the headset has improved the size of the lenses to widen the field of view, making the Gear VR's experiences feel more immersive than the original launch model. Price: £100.

● GOOGLE DAYDREAM

Google Daydream uses a phone (such as Google's Pixel and Pixel XL) to power VR experiences, but unlike Samsung's 'walled-garden' Gear VR, is not exclusive to Google's own phones – it works with the Moto Z, and is expected to support other Android devices in future.

Passive (think 360° video and animation) and semi-active content is best suited to Daydream, although the power of the Google Pixel and Pixel XL is not to be scoffed at: both possess Qualcomm Snapdragon 821 processors and an embedded Adreno 530 graphics chip.

The headset comes with a handheld controller, for easier navigation than with the Samsung Gear VR's on-headset buttons. The cheapest headset featured here, its fabric-covered design is made for comfort. There's not much content for Daydream yet, but given the cost – not to mention partnerships with Netflix VR and HBO NOW VR – there's a good opportunity to make your mark using this tech. Price: £90.
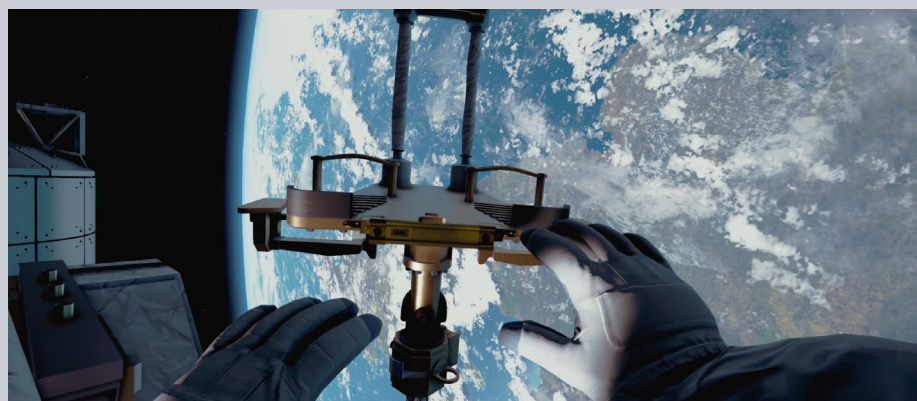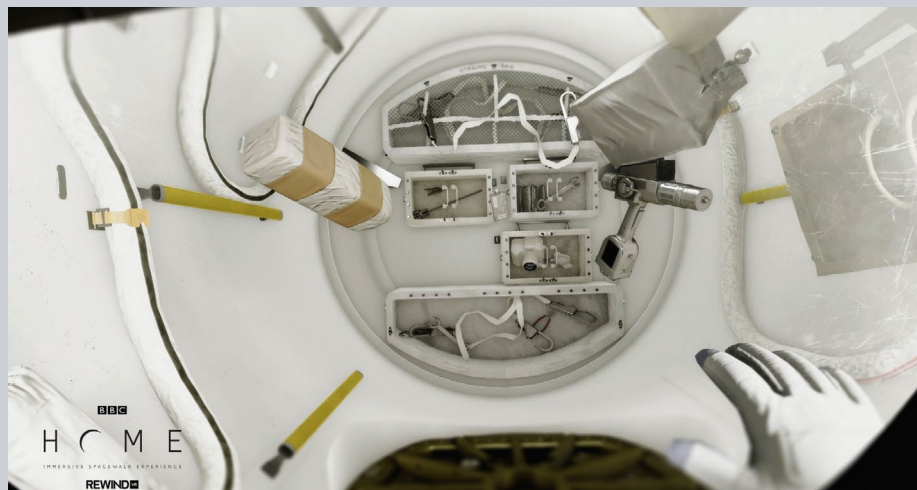
BEST FOR
EARLY
ADOPTERS

OUT OF THIS WORLD

EVER WANTED TO SEE THE EARTH FROM 250 MILES UP, WITHOUT THE NEED FOR A SPACESHIP? INSPIRED BY NASA'S TRAINING PROGRAMME, REWIND'S HOME – A VR SPACEWALK IS AN INTERACTIVE VR EXPERIENCE THAT'S PACKED FULL OF AWE, AND A GOOD HELPING OF PERIL TOO

Designed to inspire the next generation of scientists, REWIND's Home – A VR Spacewalk features an electrifying 15-minute VR mission set on the International Space Station. Once out of airlock, players pull themselves around the spacecraft in order to fix external damage. But disaster strikes and they must jet-pack their way back to safety… or not. It's frighteningly immersive. "It's not something you want to do again to get a better score, you live or you die in space," laughs REWIND founder Sol Rogers.

Delivered on HTC Vive, Home was created in Unreal Engine 4. Rogers explains: "Whenever we want something super beautiful for room-scale VR, we go to Unreal Engine over Unity – it's a beautiful renderer, with better image quality. The downside is its programming and interactivity is a little harder. Unity is more like a tin opener, you can do anything with it."

Given the autonomy of the player, navigating the spacecraft was a key challenge. REWIND modified the otherwise very life-like CG version of the International Space Station (ISS), removing the handles so that users couldn't reach places the developers didn't want them to go. Audio featuring Mission Control was used to guide and was an important storytelling tool. "If you don't do what you're supposed to or you start slowing down, they get really annoyed," smiles Rogers.

Another challenge was avoiding uncanny valley – a big problem when creating realistic people with CGI. "Knowing that faces are terrible in VR, we gave the other astronaut a nice clean visor, so you can't see that there's no face," says Rogers. "Avoid photorealism – weirdly, it's easier to believe that an ogre is real than a human that doesn't look quite right," he advises.

With a haptic feedback chair and a heart rate monitor, Home can also work as a virtual reality installation that feeds back the users' own heartbeat. Subtle creaks and movements of the ISS in the audio add to the trepidation. Real astronauts tested the experience for REWIND, and one even said it was a more accurate simulation than at NASA. "She actually felt like she was back in space," says Rogers. "That was really affirming of what we'd done," he adds.

Developed in Unreal Engine 4 for the HTC Vive, the journey of Home – A VR Spacewalk starts in the International Space Centre airlock, from where players must mend the damaged craft. REWIND added a rumble chair and heart rate monitor to further increase user immersion.

CRAFTING EXPERIENCES

The biggest USP of VR is the ability to place users in environments – real or fictional – that inspire awe and delight. Just as REWIND gave users access to the International Space Station in Home – A Spacewalk (see left), adam&eveDDB and MPC Creative developed the Buster the Boxer VR, where visitors to John Lewis' Oxford Street store could don an Oculus Rift headset connected to a Leap Motion detector and Kinect camera and play with the adorable animals – including Buster the Boxer – from John Lewis' 2016 Christmas ad. Set in a back garden, with lots of brickwork, foliage and fur, the experience was developed in Unreal Engine due to its strength in visual fidelity. Users can 'conduct' the animals to make them jump, accompanied by a subtle melody as well as ambient rustles and growls. Intuitive handtracking was key here to reduce the learning curve for new users. "John Lewis is a family brand," explains MPC Creative's interactive creative director, Andre Assalino. "We knew the audience would include kids and grown-ups of all ages, so we didn't want a complex controller system."

> "WHEN PEOPLE PUT ON 360 HEADSETS, THEY EXPERIENCE FILM AS THOUGH THEY WERE THERE… IF PEOPLE ON CAMERA TALK TO THEM, THEY FEEL A HUGE EMOTIONAL CONNECTION"

Another challenge was rendering such rich content at 90 frames per second per eye – something essential in VR to avoid motion sickness. "If there's any lag, it'll make you feel really sick," says Assalino, who also suggests thinking beyond the headset. So other shoppers could understand the experience, MPC Creative developed a 3D camera that captured the player and transposed it on-screen onto their experience in real time. At the end of the game, the player received a receipt featuring a URL of their video. "VR traditionally isn't shareable, so that was really important to us," Assalino adds.

On the more fantastical side, Framestore worked with Warner Bros to develop Fantastic Beasts and Where to Find Them VR, an interactive experience with mind-bending VFX for Google Daydream based on JK Rowling's latest tale. The experience is set within protagonist Newt Scamander's shed, where players can flick through his books, cast spells using a wand (in reality, the Daydream controller) and even meet magical characters from the film. The project pushed the boundaries of what can be done with mobile VR, and is an excellent example of what's to come. The team invented techniques to combine real-time interactive elements with an environment rendered offline, increasing the visual fidelity of the experience and making it all the more believable. Similarly to Buster the Boxer, the strength of this project lay in its strong integration with other marketing strands. "It's important not to create a VR project in isolation," states Assalino.

PROMPTING REAL FEELINGS

But VR's power to inspire needn't just be about spectacle – its ability to generate empathy with real world situations is one of its biggest strengths. "When people put on 360 headsets, they experience film as though they were there," says Henry Stuart, CEO and co-founder of VR studio Visualise. "If people on camera talk to you, you feel an emotional connection. There's huge value in that." A Walk In Their Shoes, a recent project by AT&T and Mycoskie for ethical shoe brand Toms, involved creating a 360° film for Google Cardboard that follows a Toms customer to Colombia, where the viewer sees how his purchase has helped a child there. The inexpensive viewer was given to Toms customers when they purchased the shoes. Another Google Cardboard project is #prideforeveryone, a global VR Pride parade made for Fundación Sergio Urrego that allows anyone – even in places where homosexuality is illegal – to join in the fun and know that they're not alone.

This sense of closeness also allows us to explore historical events in an unprecedented way – something sure to interest brands with a strong historical narrative. Excellent recent examples include Remembering Pearl Harbor, a collaboration between TIME's LifeVR, HTC and Deluxe VR, ›

ON POINTE

COMMISSIONED BY SKY VR, GISELLE VR TRANSFORMS CHOREOGRAPHER AKRAM KHAN'S GRITTY PRODUCTION FOR THE ENGLISH NATIONAL BALLET INTO A STUNNING 360 VIDEO, BRINGING THE SHOW TO A WHOLE NEW AUDIENCE

Choreographer Akram Khan and ENB artistic director and prima ballerina Tamara Rojo are known for challenging perspectives on dance. So when Sky VR was commissioning pieces for its new app, the prospect of translating Akram's dark Giselle into a VR experience was an excellent fit. Giselle VR is a 2.5 minute stereo 360° video and can be watched on Google Cardboard, Samsung Gear VR and Oculus Rift via the Sky VR app. The experience shows Rojo dancing around the viewer in an abandoned factory, emotionally portraying the plight of the ballet's heroine, Giselle.

Such expressive movement at varying depths posed plenty of problems – not least that Rojo was constantly crossing over the stitch points from camera to camera. The solution was to design a bespoke filming method using two RED Weapons on a mirror rig, which followed Rojo's movement from a central point. Once complete, the team then captured hundreds of stills to develop a static 3D environment. The footage of Rojo dancing could then be tracked into the environment in post-production. "Normally you track the other way round: a still object on to a moving object," explains Factory 42's creative director, Dan Smith. "But in our case we were tracking a moving object – Tamara – into a 360° stereo world made from stills," he explains.

After the tracking, the team rotoscoped around Rojo so she blended into the environment perfectly, before animating over 50 different light trails as a visual echo of Rojo's moves. "We later changed it to etherial smoke trails, which fits a lot better with Akram's very dark Giselle," says Smith. Once the trails were composited in, the final stage was a clean up in Mistika and a colour grade. It was a big job and post-production took a team of five around six weeks of full-time work.

Although Giselle VR is a rich visual spectacle, finding a strong narrative was essential for Smith. "The camera plays the part of Albrecht, Giselle's lover," he says. "Her performance is directly to him." Smith also worked with choreographer Khan to give the dance a beginning, middle and end. "We're getting past the demo stage of VR now. Find a story: it can be simple, but you need one."

Factory 42 filmed Tamara Rojo's performance using a custom rig in just one take, and then tracked it onto more than 400 stills of the background.

Setting up the space ready for the shoot was one of the most challenging parts of the project. Factory 42 fitted a 20m x 20m sprung floor to make the industrial space suitable for ballet, and the large windows were blacked out completely so changes in light would not affect the finished film.
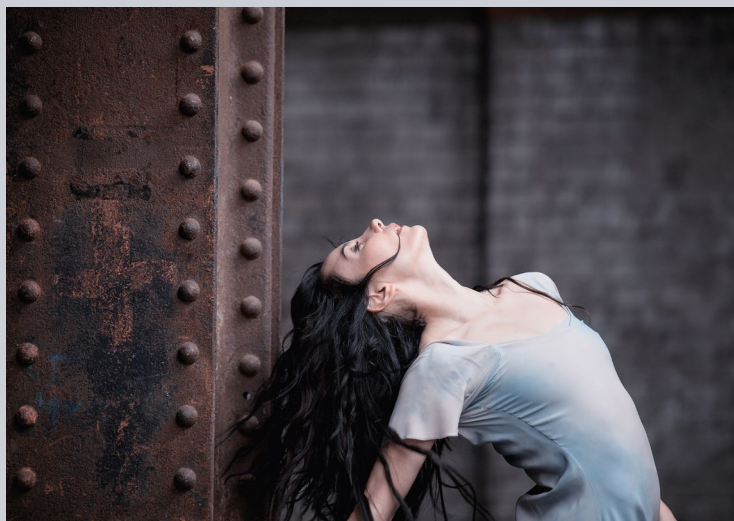
❯ which follows Lt. Jim Downing through the attack using HTC Vive. Similarly, Easter Rising: Voice of a Rebel (for the Oculus Rift) is a powerful account of war-torn Dublin in 1916, created by the BBC, Crossover Labs and VRTOV, which uses a distinctive geometric animation style hinged on the idea of reconstruction, a well-crafted narrative and plenty of haunting eye contact. But creating emotive 360° content needn't be sombre or incredibly high-tech. To see how powerful and infectious positive energy in VR can be, just watch the BBC's YouTube360 video of Leicester City fans celebrating their Premier League win in a humble pub.

"Build an interesting narrative," says Visualise's Stuart. "Cajole the client into that way of thinking. Your experience needs direction and thought, and must give users more value than just looking around." In December 2016, Visualise worked with The Financial Times on Hidden Cities: Dublin, a 3D 360° video inspired by the gruesome Emerald Noir crime fiction genre that has emerged in Dublin since the recession. The film was produced for an FT microsite, Facebook and YouTube. In the film, the FT Weekend Magazine's associate editor Natalie Whittle explores the darker side of the city with award-winning crime writer Tana French, who discusses the places that have inspired her book. It was a complex shoot – the sweeping cinematic images in low light were shot on a custom-built 3D (stereoscopic) VR rig based on two Sony A7sII cameras with modified lenses, whereas external shots and several time-lapses were filmed using a Google Jump rig. "It's not a very good advert for Dublin at all," laughs Stuart. "It's a brave move for Google too – you'd expect them to want to pin restaurants, but here we have graveyards and Poolbeg power station," he adds.

NOT JUST A TECH DEMO

Although tech demo-style VR rollercoasters and race tracks have been done to death and are,

> ## "BUILD AN INTERESTING NARRATIVE. CAJOLE THE CLIENT INTO THAT WAY OF THINKING. YOUR EXPERIENCE NEEDS DIRECTION AND THOUGHT, AND MUST GIVE USERS VALUE"

thankfully, mostly behind us, the idea of the demo shouldn't be abandoned all together. The immersive nature of VR makes it an excellent education tool, whether you're showcasing a new product or using VR as a documentary medium. To launch Jaguar's I-PACE car, REWIND collaborated with creative agency Imagination to create a real-time multi-user social VR experience for press and VIPs over two continents. Using 66 connected HTC Vive Business Edition headsets, REWIND developed an environment where users in LA and London were able to interact with each other, and then beamed in live video of a presenter talking through the car's innovations. Built in Unity, the experience involved 3D film content and live video (including the designer demonstrating the design process using Tiltbrush), and interactive elements where each user could pick apart the engine to see how it worked.

There was, of course, a VR test drive – something integral when your prototype car is so precious no one can touch it. The PR buzz around the launch was phenomenal, but REWIND also launched a light version of the experience to Viveport (the app store for VR) that night, so anyone in the world could experience the fun.

THE FUTURE OF STORYTELLING

The end of 2016 saw some canny acquisitions (The Eye Tribe by Oculus, and Eyefluence by Google) that hint that eye-tracking will be a big addition to VR in 2017. As well as allowing you to shoot lasers out of your eyes, the technology will be a big boon for navigation. It will also be huge in terms of understanding the psychology of a user – the gamer that frequently looks at a weapon, but doesn't pick it up, for example. "The reality is that it's adding another interactive element to VR," says REWIND's Sol Rogers, who has worked on projects for FOVE – the first real-time engine VR platform with eye-tracking, which is expected to have a consumer launch later this year. "Plus, for marketing exercises, we can track where you're looking, what your ❯

eyes rested on, and for how long." Another benefit is what's called foveated rendering – the tech that FOVE is named after – where only points where the eyes focus are rendered at high-res, giving a 4x performance boost. This makes high-quality, wire-free VR a real possibility.

But the star of the show has to be mixed reality. "I have said rather boldly that mixed reality is the biggest tech advancement since fire," says Rogers. "It's the first thing that augments human intelligence where I can add in as much education, knowledge and training that I want." The implications on training and creating in 3D are huge – think complex surgery or 3D modelling – as is the ability to see products like a new kitchen unit or sofa located in situ before you buy. Asobo Studio, a French studio that has developed games for the developer edition of Microsoft HoloLens agrees. "Speaking as a marketing person, I've never seen anything like it in terms of involvement," says Asobo Studio's communications manager Aurélie Belzanne. "It's not the same as VR. Imagine you are able to invite your favourite star into your living room, and have them perform a song just for you."

The games that Asobo Studio has created for HoloLens aim to show developers what can be achieved with the new technology, which features 12 sensors including four environment-understanding cameras. Fragments is a life-size first-person crime thriller set in your living room, whereas Young Conker features cute characters that race around the room. "The magic part is being able to read your environment," says Asobo Studio founder Martial Bossard. "Knowing a table is a table and how to react to it is the path where no-one has succeeded before." Bossard's advice to those that want to explore this exciting new media is to build acclimatisation time into your games, work iteratively and adapt quickly to new paradigms. "Normally, you show the player what you want them to see, but here the user can look anywhere, not necessarily where you want them to. You need to tease them to look in the right place and be flexible with your storytelling." In mixed reality, as with VR more generally, the sky really is the limit, and the rules are as yet undefined. ◾

NEXT MONTH

TOP 10 CITIES FOR DESIGNERS
Join us on a globe-trotting journey around some of the most exciting places in the world to live, work and visit, plus a few hidden gems.

MAKING IT MEANINGFUL
FIVE WAYS TO MAKE YOUR VR EXPERIENCES MORE IMMERSIVE AND ENJOYABLE

1 Write a story
Strong storytelling is vital for meaningful VR. Even if your project is essentially a product demo, try to craft a narrative for the user journey. Tease viewers towards the action with visual or audio cues. If the piece is interactive, build a discovery phase into the story so that VR newbies can learn how to navigate.

2 Integrate to accumulate
Don't think of a VR project as an isolated piece – develop a narrative so it echoes or expands on existing marketing campaigns or brand stories. The best VR gives the user access to something they would never normally see or feel, so think about aspects of the brand that are truly inspiring.

3 Make the viewer forget
A gripping story or lots of interaction can help viewers forget they are in virtual reality. One-on-one experiences tend to have the most impact – just make sure your subject isn't too close to the camera. CGI can often be more 'real' feeling than live action as disbelief is already suspended – just avoid uncanny valley with a strong animation aesthetic, or by sticking soley to non-human characters.

4 Plan, test, fix
Storyboard every shot, examining all the possible outcomes. Choreograph scenes to avoid awkward stitching, for example, if you're using several cameras, it's important that characters don't appear in two places. Spend time mending 360° environments in Nuke or Mistika to avoid painful experiences and work iteratively, testing all the time as you go.

5 Keep it simple
VR is generally 10 times more intense than other media, so slow and steady experiences are the most pleasurable to watch. Keep camera moves slow or static, and avoid pans, horizon pitch and vertical oscillation. Don't overfill the 360° field – the viewer will feel frustrated that they've missed the action.

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MOLECULAR VISION

Mural specialist **Florence Blanchard** blends her scientific training with a background in graffiti to create a unique style of colourful, abstract art

FLORENCE BLANCHARD_ Florence Blanchard began writing graffiti in the early 1990s under the name Ema, and spent 10 years based in New York, where she graduated with a PhD from New York University in 2008. Her work is directly inspired by her training as a scientist, and depicts abstract molecular landscapes questioning our idea of visual perception. www.florenceblanchard.com

■ WORDS: Nick Carson PHOTOGRAPHY: Mark Howe

Bliss, Florence Blanchard's mural at @92Burtonrd in Sheffield: "I had a great time taking my time," she says.

Spraying graffiti on the city streets and studying for a PhD in molecular biology may, on the face of it, seem worlds apart. And for Florence Blanchard, those two stages of her life – in France and New York respectively – were also separared by thousands of miles of sea. But they are also jointly responsible for inspiring and influencing her artistic career.

The leap between graffiti and mural painting may not seem huge, but while Blanchard's early urban work may have informed her creative process and love of art, it was arguably her scientific research that shaped her style.

Inspired by what she saw under the microscope in the lab, Blanchard has brought her colourful, abstract shapes, forms and patterns to all manner of creative applications, ranging from huge external murals on the sides of buildings to gallery installations, prints, illustrations sculptures and more, as well as exhibiting in Sheffield, London, Berlin, New York and Chicago, and as far afield as Japan.

Following her engaging talk at OFFSET Sheffield, we caught up with Blanchard to discuss her unique background, her style and craft, and the ins and outs of her creative processs…

You started your creative career as a graffiti writer. Does this give you a particular angle on creating artwork – murals in particular?
Graffiti was a great way for me to learn how to paint. From early on I had to think of visuals with limited colour palettes, budget, space and time constraints, which taught me many transferable skills that I am still using in my work today.

Also, I spent the first 15 years not thinking graffiti was a career – which allowed me to evolve organically, as opposed to having the pressure of making a living from it.

Do you miss graffiti at all?
I don't, because I spent enough time doing it and then evolved to do something else when it felt that it was time to do so. The bits that I still liked from it, I kept, and continue to use in my art practice.

Your training as a molecular biologist must have given you another unique perspective on the world. To what extent has it affected your creative process?
Since I graduated from my science studies in 2008, I've been working on and off on scientific projects as a hobby. It's been difficult to determine in precise ways how it has affected my art, because I've been so close to the topic for as long as I remember being a painter.

As I am gradually detaching myself from that professional world, I'm starting to understand the impact its had. What attracted me to molecular biology in the first place was the observational side of it. Everything I've done in science has involved looking at, and comparing, different microscope preparations through powerful lenses.

For many years, I used both visual and quantitative approaches with the aim of establishing patterns or correlations between biologial samples in different conditions, and I became fascinated by how reality may appear differently depending on the angle and level of magnification, and how sometimes looking at things too closely may cause you to lose sight of the bigger picture.

That's why I like painting either large-scale murals, or very small paintings on paper – there's something about the idea of shifting scales to change perspectives that really seduces me.

How did you make the stylistic shift between traditional graffiti and more abstract, flat-colour work? Was it quite organic and gradual?
Yes, it was more or less organic and gradual – but a final shift occured at the end of my studies. At some point, I had to stop everything in my life in order to finish my PhD, so I actually didn't paint for an entire year. Once I started again, I was ready for something new. I moved countries, and all these factors together helped me with this shift to a new style.

You mentioned in your OFFSET talk that science is a very male-dominated profession, as are certain areas of design… was the ▶

Above: Adding a splash of colour to Sheffield-based recycling charity RECLAIM, whose HQ was being rebuilt after burning down.

Left: It took six days to paint this mural, Kodama, in the middle of the Japanese countryside.

Right: Action shot of Blanchard's Kodama mural being created, featuring the use of a cherry-picker.

▶ same true in graffiti? Does gender have any bearing on your practice?
I think the professional world in general is male dominated. Even in professions where you see a lot of women, there is often a man around who will have more power and a better salary.

Graffiti and science are no exception, but again graffiti is not a profession so that's not really a problem. Graffiti for me was always more or less a solo activity, and never required acceptance from others – that's probably why I did it for so long. But the question of gender has no place in my work.

Although you're now based in the UK, you were born in France, spent a decade in the US and have exhibited worldwide – with a recent show, Something Made Different, drawing on influences from Japan in particular. To what extent is your work inspired by your travels?
Painting and travelling are my two favourite things to do. In 2014, I painted a very big, self-financed, mural in the countryside in Japan thanks to a good Japanese friend of mine. I ended up working with an impromptu team of volunteers who

were all really enthusiastic, and we had a great time working on this very personal project.

It's this kind of experience that greatly influences my practice, and I hope to have more projects and experiences like this in the future.

How important is your national identity? Do you still see yourself as a 'French' designer?
I left France 16 years ago, and spent the last part of my 20s and 30s abroad. These were really formative years, so it is hard to consider myself as a 'French designer'.

It's a bit like my gender, I suppose. Yes, I'm definitely French, but I don't think this has an important place in the way I create art.

Talk us through your process when working up a design for a mural or sculpture. How much do you sketch on paper first before translating it onto the physical surface?
I generally don't sketch much on paper, but I use Photoshop to draw a rough composition onto a photo of the wall, or the space the final design is going onto.

I never finalise much beforehand, unless I have to, because I find it

hard to copy a design onto a wall. I focus more on colours and contrast.

Do you often have to amend a design, to fit around a particularly different shape for instance?
Working outside, there are often unexpected physical problems to overcome, such as a drainpipe in the middle of the wall; a branch that prevents you using a ladder; a cherry-picker that doesn't let you extend to a corner; so it's always better to stay flexible with your design.

You said of a recent project at @92Burtonrd: "I had a great time taking my time." Do you like to give a piece plenty of love and attention to get it just right – and does that contrast with the more quick-fire nature of graffiti culture?
With graffiti, you can chose a design that can be done in 15 minutes. It's very simple and fast – sometimes dirty – but that's the nature of it, and that can be very enjoyable too.

When I work on a commission, it's completely different and my enjoyment is often proportional to how open the client is. For that specific project, I was offered the wall with no constraint. I was able ▶

Left: One of the murals Blanchard created in Hobart, Tasmania, as part of MOFO Festival in spring 2016.

Bottom left: Moieties, a series of 3D-printed sculptures produced with Sheffield Hallam University for the Catalyst Festival of Creativity.

Below: Mural in the district of Ixelles, Brussels.

Bottom right: This large window installation at the Millennium Gallery, Sheffield was the first time Blanchard worked with vinyl.
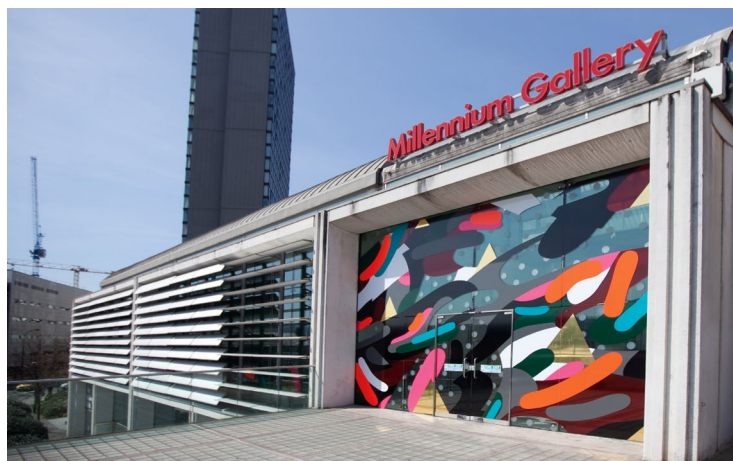
Above: Tropical Molecular, Blanchard's latest piece as part of Feature Walls SHF, a mural festival curated by B&B gallery.

▶ to do whatever I wanted in the amount of time I needed.

It was all decided over a couple of emails and a meeting with just one very nice person – so a really stress-free project! Stressful projects include dealing with teams of people in big institutions where there are often breaks in communication.

Since I am just a one-person team and my skill is painting, I find it hard to keep up with the email load that sometimes come from this type of project. During crisis time, I always ask around for advice from my graphic designer friends, who seem to champion the art of professional communication.

You've experimented with 3D printing too, through Printing Sheffield. Do you find it easier to express your ideas this way, compared to traditional sculpture?
It's a great way to start working with 3D. The hardest part is to come up with a digital file that represents what you like to produce, but luckily the 3D printing team I worked with at Sheffield Hallam University are very knowledegable, and were able to assist with this part of the process.

The beauty of this technique is to be able to scan objects and reproduce them at different scales and in duplicate. I chose to make

some totem-like sculptures, based on objects I found in my house. It was so much fun! I'd love to make more, and experiment with different types of materials.

You choose to sell your art through Redhouse Originals, how did that relationship start and how exactly does it work in practice?
I sell prints and paintings through three different UK galleries: as well as Redhouse Originals in Harrogate, there's also B&B Gallery in Sheffield and Nelly Duff in London.

Generally, I produce pieces for an exhibition and bring them to the gallery, and they deal with the rest. I try not to think too much about what might or might not be lucrative, as I'm not very good at predicting what will sell or not.

There is no secret recipe, other than to produce work constantly. But I have often found that the more personal the work, the more interest it generates. Most of my designer friends are glued to their computers, so my advice to them is: forget about vectors, and get your hands dirty. □

Next month: Peter Curzon, co-founder of Storm Studios with the late Storm Thorgerson, discusses the art and craft of the studio's iconic "normal but not" album covers over the years.

HOW TO PUT ON AN EXHIBITION

Blanchard exhibits worldwide – here's our advice for following in her footsteps...

01 DECIDE WHO'S RUNNING THE SHOW
Will you host your own, or approach an existing show? If it's the latter, ensure it's right for your work. Budget for printing, frames and delivery. Also, consider how experienced the organisers are. Will they take care of your work, protect it against theft and display it professionally?

02 UNDERSTAND THE PROCESS
Some organisers prefer samples by email; others request a physical portfolio; some are happy with a web link. Do they need a CV or price list? The organiser should also request information for captions and the event catalogue. If they're not asking these questions, proceed with caution.

03 PREPARE THOROUGHLY
Visit the venue, and think about how best to display your work in the space, considering its size, scale and format. As a rule, the centre point of a piece should be at eye-level for an average-height person. Don't cut corners to save money as you'll end up regretting it. Pay for the best prints, mounting and framing you can afford, and remember to consider how you'll transport work to the venue, too.

Paint your own masterpiece

- Fun, step-by-step artist insight every month
- Three issues for £5 when you subscribe*
- Watercolours, acrylics, pastels, oils and more
- Interviews, features, news and reviews

THE RISE OF THE SHORT COURSE

Tom May discovers why more and more students are opting for short, intensive design courses over traditional university degrees

A lot's changed at universities over the last 25 years. In the 1990s, the number of students attending increased massively, as did the number of institutions, with all polytechnics allowed to convert themselves into universities. Maintenance, once provided to poorer students in the form of grants, switched to loans; then in 1998, tuition fees were introduced at £1,000 a year. This was raised to a maxiumum of £3,000 in 2004, and later, the tutition fee cap increased in 2012 to an eye-watering £9,000 a year.

As a result, many youngsters are now questioning whether the huge debt associated with a degree is worth it. And this is bringing renewed attention to a range of shorter, more intensive courses offered by colleges like Shillington, Hyper Island, Escape Studios and the new Strohacker Design School.

Short courses have always existed. But they've generally been geared towards preparing for, or supplementing, a three-year degree; foundation courses being the most common example. But that's not what we're referring to here: we're talking about courses that exist entirely outside the traditional university system.

Many people involved in these courses have become disillusioned with traditional institutions and aspire to provide something qualitatively different. Take Bill Strohacker. He's run his own studio for 15 years, and spent six years teaching graphic design at a college part-time. "But I didn't like the way it was all going," he says. "The course costs were rising; the courses were opening up to more students. It's really become about: 'How many students can you get on a course? How much money can we take?'" So he decided to set up his own Strohacker Design School, which opened its doors in January of this year.

First, though, he did some research. "I spent a couple of years talking to design agencies around the country, and asking what they really needed, and what they were getting," he explains. The results were revealing. Strohacker reports a

Far left: Shillington graduate Adam Morgan's handmade, mixed-media painting for the University of Utah's new Lassonde building.

Left: Adam Morgan's branding and packaging concept for health supplement brand Peak Naturals.

Below: Work by Serious Business, an agency formed by Hyper Island students, for London jobs start-up Catapult.

widespread dissatisfaction over the calibre of university graduates. "Several agencies in London told me they'd interviewed up to 50 or 60 graduates, but still couldn't find the right fit for their company," he says.

That isn't everyone's experience of course, and Strohacker is keen not to single out any particular institution. But there are many voices in the industry echoing the idea that not every university degree is worth its weight in gold.

John Spencer, founder and creative director of Surrey design studio Offthetopofmyhead, recently stepped down as an external examiner at a leading university. "The rise in fees has had the devastating result of changing universities from places of learning into commercial enterprises," he maintains. "They're churning out mediocre design graduates on a grand scale."

And that has a direct impact on employers, says Lee Coomber, creative director at Lippincott: "Design courses are not equipping graduates well enough for jobs in the real world," he believes. "I see many portfolios that are full of professional, slick and convincing work, but they're increasingly generic and bland. Design education must also focus more on seeing work through the eyes of the customer. It's vital that design graduates can talk about their work in a way that makes sense to a potential client or interviewer, something which they're currently not adequately prepared for."

Sean Thomas, creative director at Jones Knowles Richie, concurs. "There's a handful of colleges doing great work in preparing students for the world, and what we are seeing from them is better than ever. But there's a greater volume producing graduates disconnected from the industry, making visually poor work to a formula."
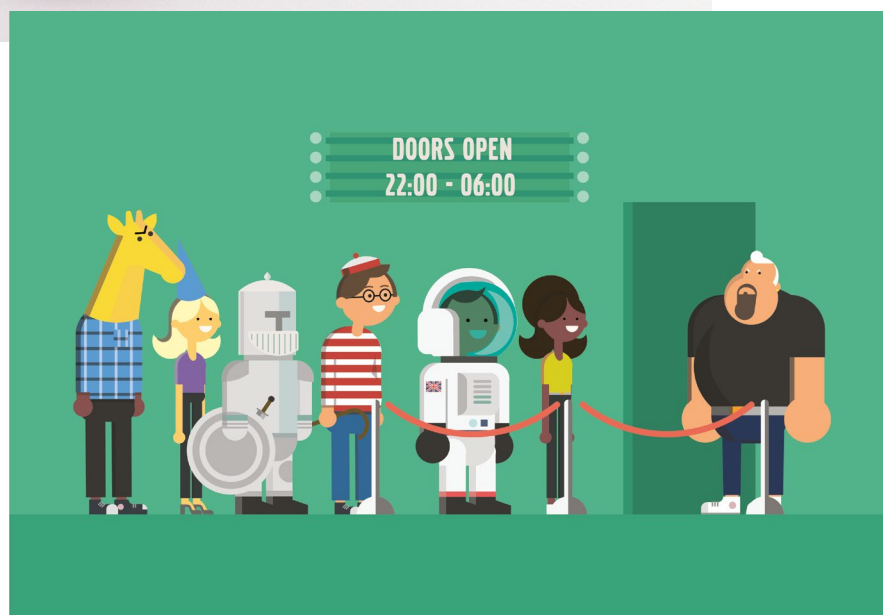
Similarly, while Alasdair Lennox of FITCH feels universities are doing a good job of preparing students for specialist and discipline-specific work, he argues that "for those interested in branding – which requires designers to cross disciplines and think strategically, even at junior level – the courses are lacking. As a general observation, it's sad to see design courses close expensive workshops in favour of cheaper computer rooms and rendering programs. While the savings might be important, the hands-on experience and experimentation potential of a workshop is infinitely more instructive for the learning process."

Of course, such critiques address failings with specific courses and specific graduates, not university education in general. But it's no coincidence that the most common complaint ▶

FEATURED CREATIVES

BILL STROHACKER
PRINCIPAL/CREATIVE DIRECTOR, STROHACKER DESIGN SCHOOL
Bill has worked in design and education for the past 25 years as a creative director, designer and educator, from foundation to degree level. He has a full service design studio based in Chichester.
www.strohackerdesignschool.co.uk

SARAH MCHUGH
UK DIRECTOR, SHILLINGTON
Sarah has been the UK director at Shillington since July 2013. She previously spent three years as a graphic design lecturer and five years working as a graphic designer at Urban Splash.
www.shillingtoncollege.co.uk

LEE COOMBER
CREATIVE DIRECTOR, LIPPINCOTT
Lee is a senior partner and creative director at global creative consultancy Lippincott. He previously held creative director roles at Wolff Olins and Addison, and is involved in mentoring schemes with young designers.
www.lippincott.com

ALASDAIR LENNOX
EXECUTIVE CREATIVE DIRECTOR, EMEA AT FITCH
Alasdair directs the creative output for marketing and advertising company FITCH in the EMEA region. He has judged at Cannes Lions 2015, Brand Republic Digital Awards and D&AD New Blood; and was Interiors Chairperson at Design Week Awards 2016.
www.fitch.com
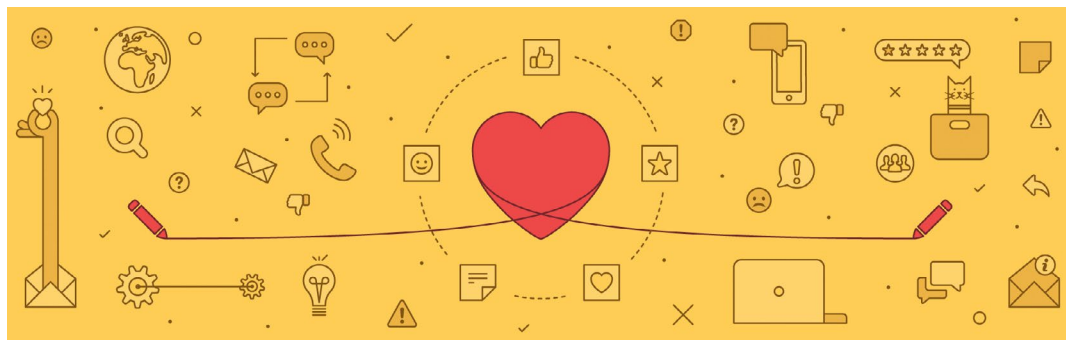
– that some courses are not sufficiently practical in preparing students for real-life work – is being addressed in intensive short courses.

One example is Shillington, which has colleges in London, Manchester, New York, Sydney, Melbourne and Brisbane, and has just celebrated its 20-year anniversary. Rather than passively attend lectures, students are in classrooms that are as much like studios as possible, where industry professionals ask them to fulfil demanding, realistic briefs to short deadlines.

"OUR COURSES ARE FAST: JUST LIKE THE REAL WORLD... THEORY AND PRACTICE ARE WOVEN TOGETHER FROM DAY ONE"
SARAH MCHUGH, SHILLINGTON

For this reason, UK director Sarah McHugh argues the brevity of these courses is actually a positive. "Of course three months sounds fast," she says. "It is fast: just like the real world. Our courses are designed for students to work hard and get the most out of every minute. Theory and practice are strategically woven together from day one, so students' brains are trained to think like practising designers straight away – keeping on brief and meeting short deadlines."

Hyper Island, which has campuses in London and Manchester, as well as Sweden, Brazil, the US and Singapore, takes a similarly pragmatic view. "Our courses are 100 per cent conducted by industry professionals," says Ines Lopez, programme manager for the 45-week Motion Creative course, which focuses on animation and motion design. "We rely on them to deliver the most relevant, up-to-date knowledge and set tasks that will help our students develop. Combined with projects involving real clients, this gives the students the opportunity to develop skills that are relevant for today's industry."

Similarly, those wishing to develop their illustration or animation abilities into movie-level CG skills can take one of Escape Studios' recently introduced 12- or 18-week courses in London. Again, deep integration in the industry is key. "Often our industry partners will mentor our courses," says Escape's Mark Spevick. "So the likes of Double Negative, MPC and The Mill will watch their projects being developed over the course, and offer their feedback and advice."

It's this close industry integration that largely explains the success of such courses in getting graduates into paid employment quickly. Their websites are filled with glowing testimonials from students who've found jobs or become successful freelancers as a result of their course, and we certainly found it hard to find anyone who'd had a different experience.

Unsurprisingly, Bill Strohacker is keen to follow a similar, industry-led path with his new intensive, three-month graphic courses. He's already signed up the likes of Jamie Hewlett
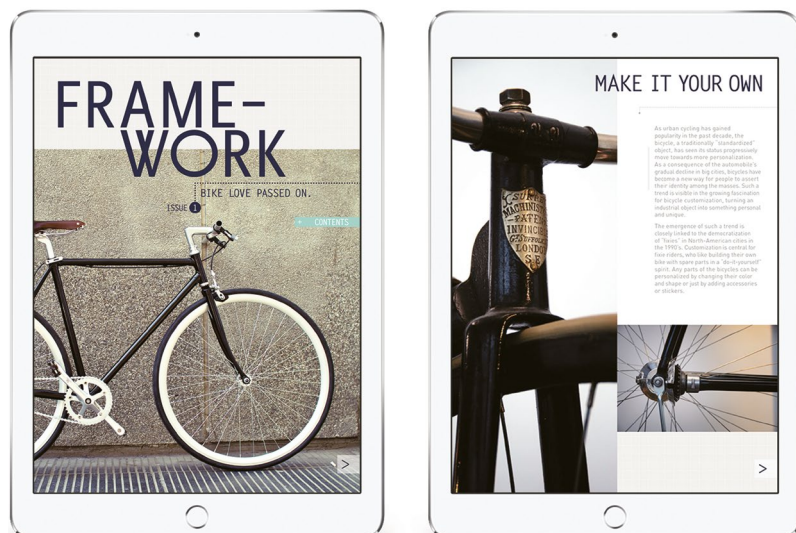
(co-creator of Gorillaz and Tank Girl), celebrated Australian graphic designer Vince Frost, and Ian Edwards, a head creative for JWT. Strohacker also plans to distinguish itself from rivals through its very small class sizes ("eight to 10 students, max") and a more flexible approach to the curriculum.

So are these short, intensive courses the future of design education? The short answer is: it's a little more complicated that that.

While these courses have developed a good name for themselves within the industry, they're still very niche, and their graduate numbers remain proportionally small when compared to the alumni of traditional universities. It's difficult, then, to find a design studio head in 2017 with strong views either way as to their effectiveness; the sample size is just too small – for now.

Perhaps more importantly, the main route into many big design studios remains a university degree, and some employers refuse to even interview anyone without one. Plus there are many ways to gain added industry experience or knowledge to supplement your university

Facing page, top: Illustration by Hyper Island graduate Linn Fritz for Facebook's new platform, Workplace.

Facing page, below left/right: Information booklet by Shillington graduate Adam Morgan in both print and digital for Golding Group.

Top: Shillington graduate Charly Tudor's designs for Framework, a monthly e-publication and app for road cyclists.

Above: The redesign of jobs start-up Catapult's website by Hyper Island graduate Thales Ribeiro's studio, Serious Business.

STUDENT STORIES
FOUR SHORT-COURSE STUDENTS SHARE THEIR EXPERIENCES

After working in advertising for 10 years, Brazilian Thales Ribeiro wanted a new direction, so he applied for Hyper Island's Interactive Art Director course. "At a traditional university, every student goes through the same path," he says. "Hyper Island requires a lot of self-leadership, but at the end, the result is much more rewarding." During the course, Ribero formed his own design agency with four other students, as an alternative to the standard internship; since then they've turned it into a real-life branding and strategic agency, Serious Business, based in Australia.

Charly Tudor graduated from a degree in Printed Textiles and Surface Pattern Design in 2006. "After a few internships, I realised it wasn't for me and pursued my second love, stationery," she says. Following six years working within various studios to art direct and manage greetings card and stationery collections, she became curious about graphic design and decided to retrain at Shillington. "After making the decision to change career, I was pretty eager to just get straight on with it," she recalls. "I didn't feel I wanted the time and cost of another degree." Soon after completing a Shillington course, she got a job as a graphic designer at Manchester branding agency Holdens.

Linn Fritz is an independent animator, designer and illustrator from Sweden, currently working as an animator at production company Buck's Sydney office. She took the one-year Motion course at Hyper Island, including a three-month internship. The course appealed to her because she had never been happy in academia. "I struggled in school and felt stupid pretty much all the time," she explains. "Hyper was definitely the right environment for me. You don't have any classes, tests or teachers; you're in charge of your own learning and of how much time you want to spend on it."

Since graduating from Shillington London in December 2015, Adam Morgan has successfully launched his own freelance graphic design business in Brighton. Before the course, he'd previously worked in the welfare sector and had virtually no design experience, although he had studied conceptual art at university. "The course was perfectly paced and easy to pick up, though very intensive towards the end," he explains. "I developed a deep passion for design and I wanted to learn more and be involved in the community. The teachers all do a fantastic job of encouraging this, and it's the main reason I went into freelancing," he continues.

GET MORE FROM A SHORT COURSE

FOLLOW THESE FIVE SIMPLE TIPS TO MAKE THE MOST OF THE BAPTISM OF FIRE THAT SHORT COURSES CAN PROVIDE

1 Do your research

With three months of your life and a significant amount of money on the line, it pays to research your course thoroughly to find out if it's right for you. Attend open days, read articles and blogs from course graduates, and speak to as many ex-students as you possibly can. They've been where you are, so are very likely to be open and willing to discuss the pros and cons of the courses they've taken.

2 Be prepared to work

Intensive short courses really are that – intensive – so you'll have to give all your time and energy over to them throughout the whole period. With days typically formatted more like working nine-to-five at a studio than just a series of lectures, you'll also have reading, homework and projects to work on in the evenings. So make sure you clear your schedule completely, and don't expect to take any time off during the course.

3 Take advantage of contacts

Most colleges attract guest speakers from industry, and the course tutors will typically have industry links too. There's also usually a strong ethos of help for graduates looking to find work after the course, but you won't have everything done for you. Be sure to make a good impression (don't miss deadlines!) and carefully cultivate any contacts you make in order to help you land that first job or freelance gig after graduation.

4 Ask for help

By their very nature, no one finds intensive short courses easy, and there probably will be areas of the experience that you'll struggle with. When that happens, don't be afraid to ask your course leaders for advice, help and support; they've seen it all before, and it's what they're there for.

5 Do it for the right reasons

Don't just choose a short course over a full degree to save money; decide whether it really is the right option for you and your career development. If you're the sort of person who'll get more out of an academic environment, where there's more time for experimentation with different approaches and to focus longer on briefs, a university degree may be the better option.

course if needed. Many agencies, such as FITCH, offer a sandwich program that lets students get to grips with the industry for their third year of university, before going back to finish their degree in their fourth. Others, like Jones Knowles Ritchie, get involved in student development by running portfolio advice sessions during events like D&AD New Blood.

To further complicate matters, it's worth noting that short, intensive courses are not just for teenagers out of sixth form. They're as popular, if not more so, among older creatives wishing to change career mid-stream, or those wishing to develop their study beyond university.

"Let's be clear, we're not trying to compete with or replace universities," says Sarah McHugh of Shillington. "In fact, many of our students have already completed degrees, or worked in a wide variety of industries, or both." So the question is less about which is best and more about which is the best fit for the individual. "We always encourage prospective students to weigh up all their options and research like crazy," she continues. "Go to info sessions, view student work, connect with graduates: you'd be surprised how much you can discover. Investing in your education is a big decision, so research away and find your own best fit."

The rise of the short, intensive course, then, stands not in opposition to traditional design education, but as just another choice in a buffet of life options. Whether you're a young adult considering a creative career, a recent graduate looking to specialise further, or an experienced creative wishing to start a new chapter, it's more likely than ever that you'll find a course for you. ◻

LOGO DESIGN MASTERCLASS

NEXT MONTH *Richard Baird of BP&O shares what his ongoing Logo Archive project has taught him about great logo design.*

FIVE REASONS TO TRAIN AS A DESIGNER

Whether you're still studying or keen to change career, Shillington reveals why design is a great choice

Planning your next career move? If you've always dreamed of becoming a graphic designer, make 2017 the year you take the plunge.

Your age, existing skills and experience don't matter. At Shillington, we help people begin or enhance their creative careers in three months full-time or nine months part-time at six campuses worldwide.

Read our top five reasons to take the leap and become a graphic designer in 2017:

1. Learning will be a daily thing

As a graphic designer, your work never stops evolving or improving. There are always new challenges to overcome and new problems to solve. It's a whirlwind of discovery and invention. You'll make mistakes, we all do, but take inspiration from Pentagram's Paula Scher: "It's through mistakes that you actually can grow. You have to get bad in order to get good."

2. You will always be in demand

In the age of automation, we're constantly told that our jobs will one day be taken over by robots. But rest assured that graphic design will always require human thinking and creativity. It's an essential cog, required by any brand or business.

3. It opens up many career paths

If an agency isn't for you, perhaps you want to venture into editorial design and work for a major publisher, or join an internal team at one of the world's biggest sports brands?

4. Boost your problem-solving skills

Steve Jobs once said: "Technology alone is not enough. It's technology married with liberal arts, with humanities, that yields the results that make our hearts sing."

Design enhances your problem-solving skills, not just because you overcome issues for clients, but because you're encouraged to consider the bigger picture. How will it add value, and achieve a brand's goals? Design boosts more skills than you may realise.

5. You'll never stop being inspired

Prone to boredom? Easily distracted? Design always leaves you inspired. Trends develop and change, keeping you on your toes, and you'll never know what's around the corner.

Kick-start your design career today!

Study three months full-time or nine months part-time at one of Shillington's campuses in London, Manchester, New York, Sydney, Melbourne or Brisbane. Find out more at shillingtoneducation.com.
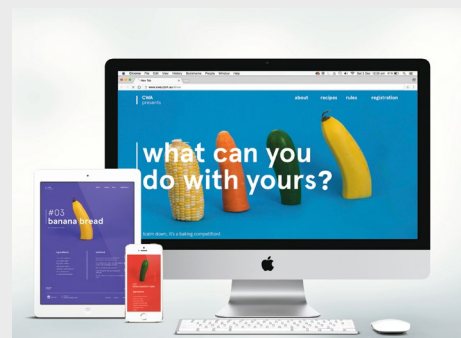
From top to bottom: Inspiring work by Shillington graduates Alexander Wu Kim, Tiffanie Rosset, Jenny Crawford and Katie Lodge.

PART 4

This special 10-part series, in partnership with D&AD, is curated by this year's New Blood trustee Tom Manning. Each advice-packed article reveals the skills it takes to survive and thrive as a young designer in the modern industry, and this month Tom looks at how best to transform your digital ideas into captivating solutions. *Subscribe today to guarantee you get the rest of the set: see page 42.*

Where will your Toms take you?
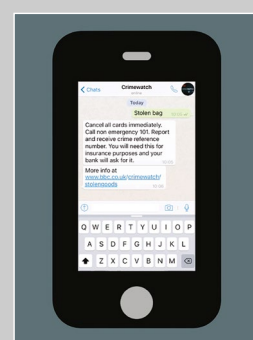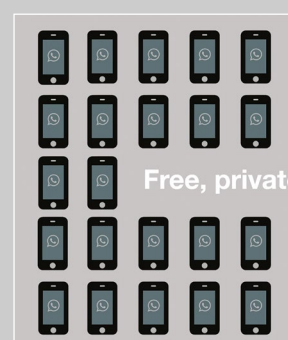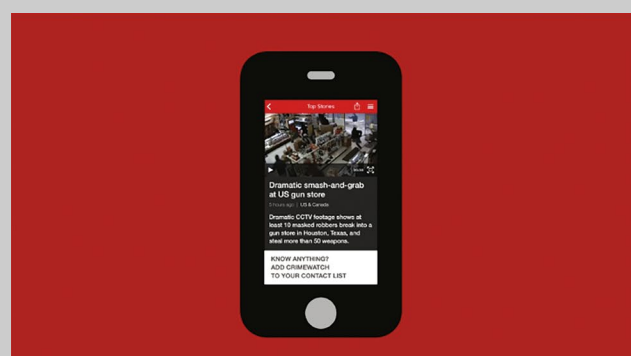
Travelling Soles
Travel with purpose
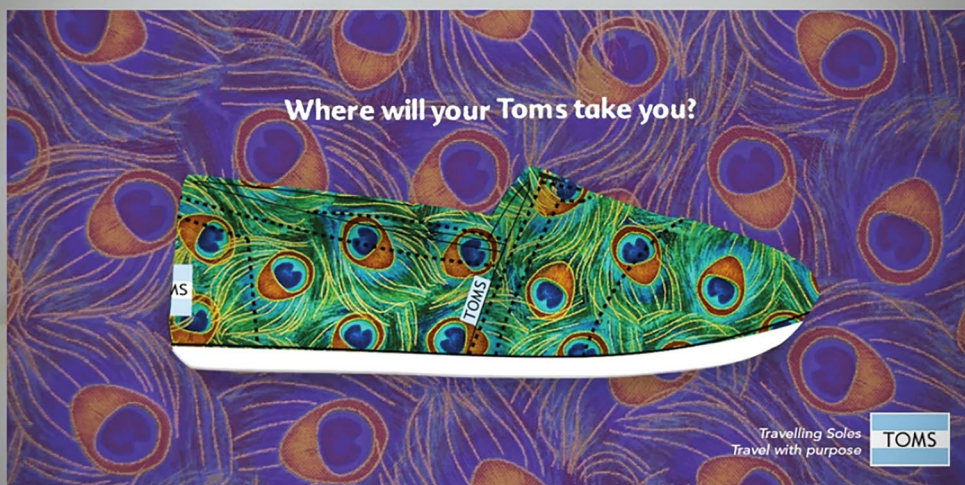
TOMS

TOMS: Travelling Soles
Nicholas Kugge and Dennis Engel's project is a volunteer travel programme that sends young people to work with TOMS' NGO partners.

PART 1 Fear and confidence often go hand in hand, and that's not always a bad thing. Part one revealed why the fear of doing something bold is an essential ingredient in a great creative.

PART 2 In the second part, we examined the art of fulfilling a design brief, why it's about understanding your audience, and how it resembles meeting a new person at a party.

PART 3 Last issue, we explored the importance of discovering your career goals and purpose, and why these don't necessarily have to conflict with making money. *For back issues, turn to page 63.*

FEATURED WORK The projects featured with this month's article are drawn from D&AD New Blood 2016's exciting range of digital work, created by students from across the country.
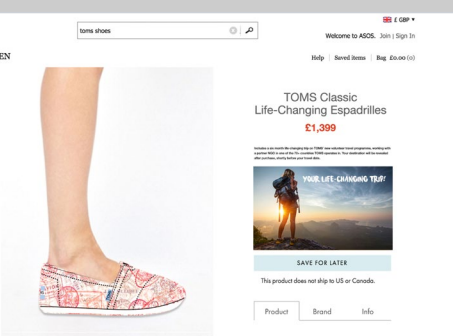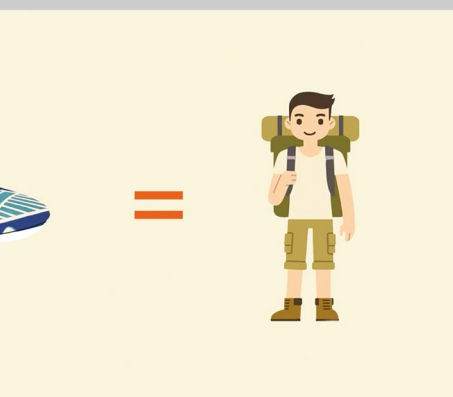
HOW TO BE MORE INTERESTING THAN NETFLIX

In part four of our D&AD New Blood series, **Tom Manning** shares how best to transform your digital ideas into captivating solutions

TOM MANNING, D&AD NEW BLOOD TRUSTEE 2016

Tom is carpeing all the diems. Attempting not to make advertising as a junior creative at Havas London, he was also elected D&AD New Blood trustee in October 2016. In his spare time he makes, designs and codes fun things on the wild wild web. He wrote this bio himself, in the third person, to try and make it more legit. www.dandad.org

Back in the '60s, a young American engineer, Doug Engelbart, invented the computer mouse. Before that, you had to memorise lines of code, then type it into a command line. Next, programmers set about creating menus, which meant ordinary people could explore a program's capabilities simply by clicking on things. This democratisation of tech snowballed. Now, half a century later, even my granny has worked out the sequence of clicks needed to share Daily Express articles on my Facebook wall. What a time to be alive.
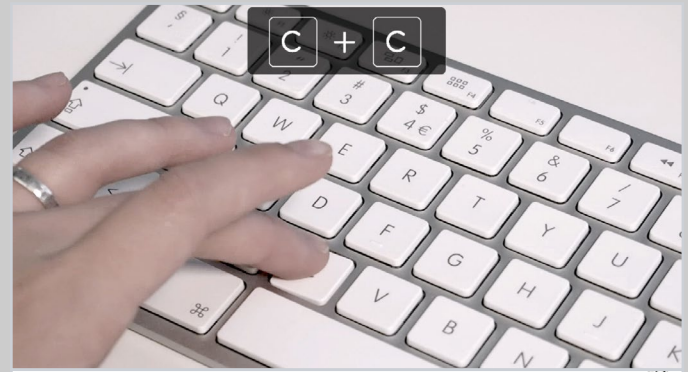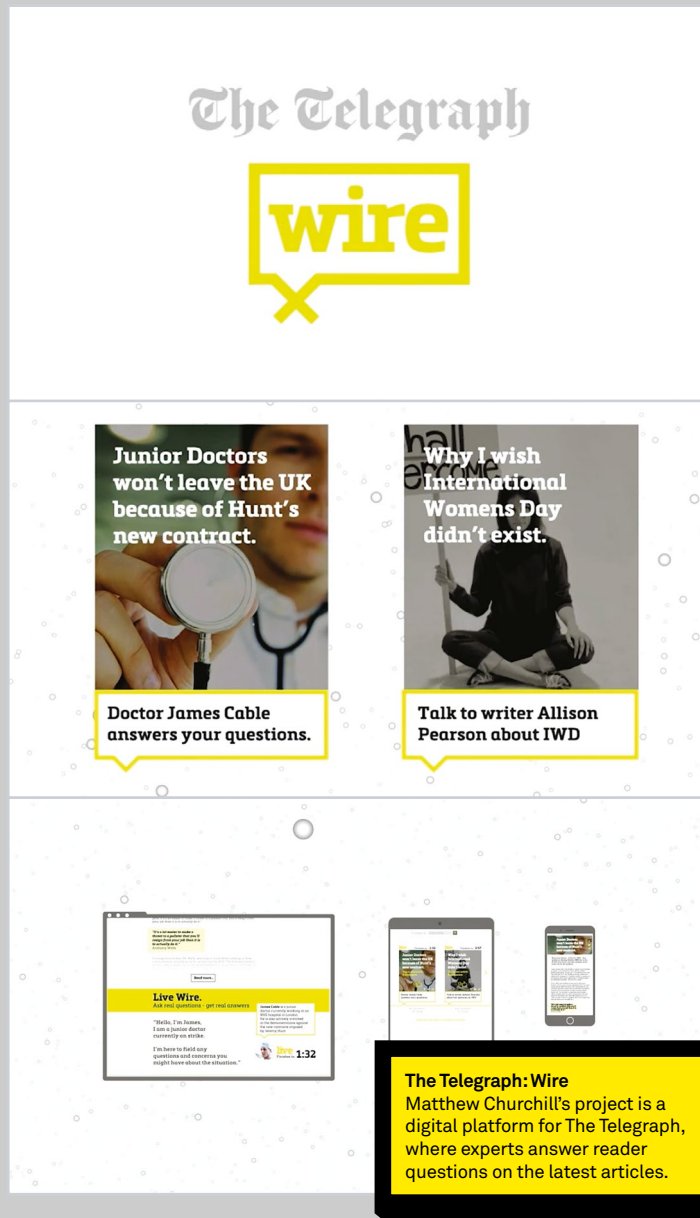
This appetite for technological innovation has design and advertising agencies completely smitten. And they're looking to us, the digital natives (gag), to create the future. But the ability to pin, share, retweet, and like has cost us dearly. The more mediated our interactions with technology become, the less we understand what's going on under the hood. How many times has Photoshop crashed on you? And how many times have you tried to figure out why, rather than swearing violently at the screen and reopening the program?

Similarly, how many times have your digital ideas ended up as scribbles on bits of paper? In my first ever crit with Andy Sandoz, now my boss at Havas, I told him I wanted to make digital ideas. He flicked through my book in under a minute and then said ▶

Crimewatch: Talk About Crime
Catherine Crocker's project aims to bring back the UK's confidence in reporting crimes through a private support hub on Whatsapp.

The Telegraph: Wire
Matthew Churchill's project is a digital platform for The Telegraph, where experts answer reader questions on the latest articles.

HAVE YOU TRIED THIS SHORTCUT?

C + C

Adobe: Brand identity
Julia Baulin's project created a new logo for Adobe Creative Cloud that directly interacts with the work of its creative users.

HOW CAN WE BRING OUR DIGITAL IDEAS TO LIFE AND GIVE PSD MOCKUPS A WIDE BERTH?

▶ to me, "Stop fucking about making theoretical advertising and mocking it up on phone screens and prototype it!" I was taken aback. But in hindsight, the very fact I'd shown him digital ideas in a printed portfolio seems ludicrous. So, how can we bring our ideas to life and give PSD mockups a wide berth?

HAVE THE IDEA
The internet is a beautiful, messed-up, infinite dimension. Your idea is competing for attention with the million other things people can do online. Is your idea more appealing than watching Netflix? It's a high bar, but it forces you to start thinking about what motivates people online. B. J. Fogg, a lecturer in behavioural design at Stanford University, states that all humans are motivated to seek pleasure and avoid pain; to seek hope and avoid fear; and finally, to seek social acceptance and avoid rejection. Which
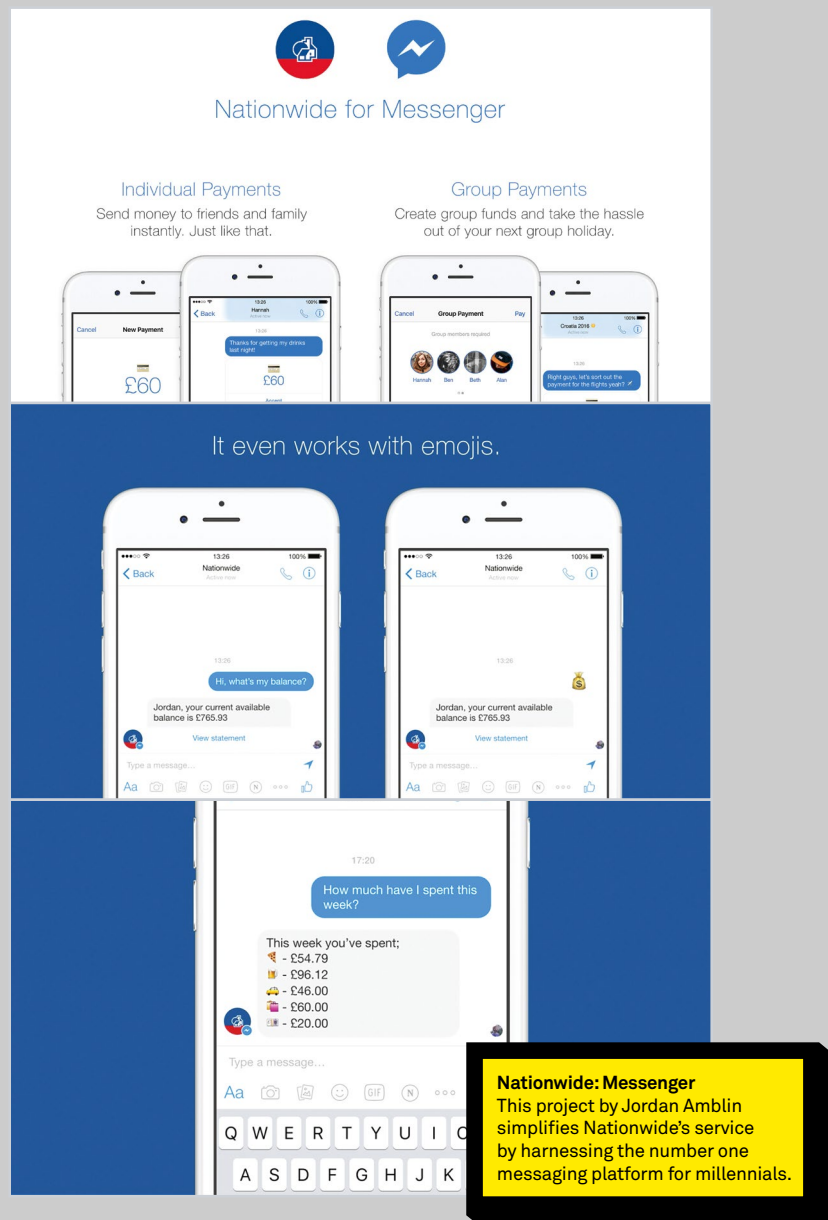
motivation does your idea tap into, and would it be easy for people to access or engage with it? The formula is: motivation + availability = action.

BUILD THE IDEA
What steps must you take to create a demo of your idea? Can you build on what already exists? Open APIs, snippets of code, and whole communities are out there to help bring your project to life. And learning how to join up sections of code is a lot easier than learning to do it from scratch. Failing this, websites like Fiverr and PeoplePerHour enable you to hire developers from around the world; a Chrome extension might only cost around £40 to build. As soon as it works, release it onto the web. If you wait for it to be perfect, it'll never go anywhere.

SHARE THE IDEA
How can you get people talking about and engaging with your idea? Make a Twitter account and follow people you think might be potential users. Can you

Nationwide: Messenger
This project by Jordan Amblin simplifies Nationwide's service by harnessing the number one messaging platform for millennials.

get in the news? Sites such as www.helpareporter.com connect you with journalists who might be looking for stories on a related topic. A simple landing page for your project that people can share or sign up to will tell you whether there's an appetite for your idea.

Imagine showing your creative director your idea in a notebook. Now imagine showing them a website and telling them you have 5,000 signups for it. Suddenly they're excited, and you're no longer dependent on their approval.

The process of creating a powerful digital idea should be like life before the mouse. Know your idea inside out and build it step by step, like entering code into a terminal. If an image or a headline doesn't work, change it. Ask peers to scan your work for bugs, buttons that don't make sense and explanations that feel long-winded, before giving you feedback.

And roll out new iterations of your project with lightning speed, ready to show the world. That's how you make great work that lives in the real world. You get your hands dirty. Be wary of the mouse. ◻

FOUR QUESTIONS TO ASK YOURSELF

ENSURE THE SUCCESS OF YOUR NEXT DIGITAL PROJECT IN JUST FOUR STEPS

—

1 WHO IS YOUR IDEA FOR?
Get specific: write a persona, or three. Who is this person, where do they work, what do they do online? The clearer your picture of this person, the more you can make your project appeal to them.

2 WHAT PROBLEM DOES YOUR IDEA SOLVE?
The bigger the problem, the more compelling your idea will seem. This doesn't have to be daunting: boredom is one of our biggest motivators, so your project might just have to excite people to be a great solution.

3 WHEN WILL USERS ENGAGE WITH IT?
Try to nail when and where is the best time to tell people about your idea. It could be at work or on the go, in the morning or the evening. Telling people about your project closer to the time they would actually use it will make them much more likely to do so.

4 WHY WOULD SOMEONE USE YOUR PRODUCT?
Try asking 'why?' five times. This method was developed by Sakichi Toyoda for Toyota and digs down through the superficial answers until you reach someone's core motivation for acting. Then you can design accordingly.

NEVER MISS AN ISSUE!

Catch up on anything you've missed by downloading our digital back issues on iPad, Android and more...
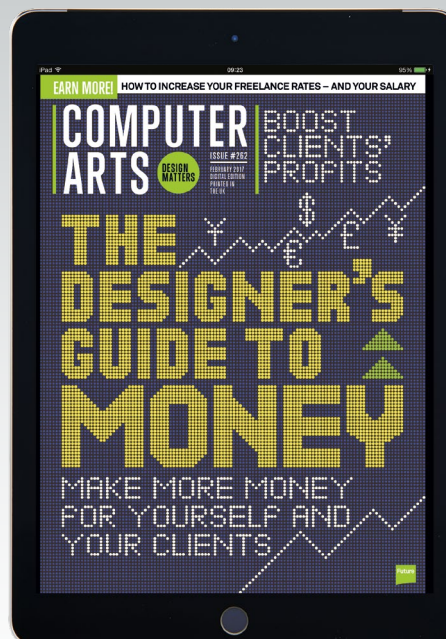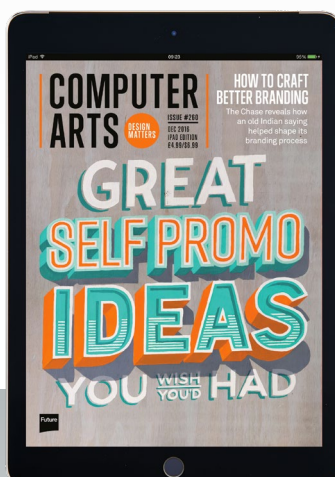
ISSUE 262
FEB 2017

- Earn more money for you and your clients
- Discover how to boost your clients' profits
- Parisian illustrator Ugo Gattoni on his large-scale art
- Behind the scenes at Animade studio

ISSUE 261
JAN 2017

Get the low-down on the colour trends of 2017, get more out of your side projects, and discover the secrets of fulfilling a brief with D&AD New Blood.

ISSUE 260
DEC 2016

Discover how to generate powerful ideas for self-promotion, learn how agencies keep on top of multiple projects, plus the crucial steps in starting your own studio.

ISSUE 259
NOV 2016

We reveal the UK's top 30 design studios in our UK Studio Rankings, plus five challenges that all freelancers face, and how to overcome them.

ISSUE 258
OCT 2016

The winners of 2016's Brand Impact Awards are revealed. Plus: discover how to flourish as an illustrator with our top tips for freelancers, and why great design should take time.

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PROJECTS

Computer Arts goes behind the scenes with world-leading designers as they reveal their working processes...

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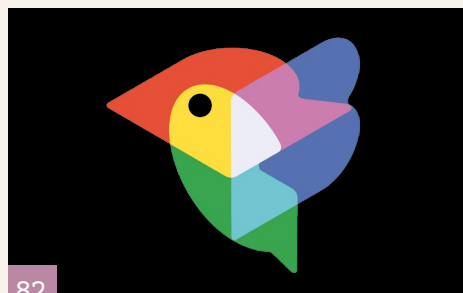
■ VIDEO INSIGHT

FREELANCER'S GUIDE TO PRINT

In a special video series in association with Route 1 Print, three print-loving freelance designers based in London share the secrets of their success
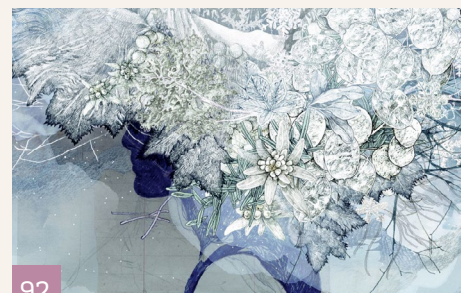
Print: it's the catnip of the graphic design world. Of course, digital witchcraft like the immersive VR experiences featured in this issue's special report will get the pulse racing, but when a beautiful publication or crisp new set of business cards drops, there's nothing quite like running your fingers over the stock and giving it a good sniff.

In a change to our usual glimpse behind the scenes at leading studios, this month our video team interviewed three freelance graphic designers who specialise in print-based work: Croatian-born Filip Pomykalo; French-born Clementine Carriere; and Catarina Bianchini, who despite her Italian name and heritage, hails from Scotland. All three are now based in London, and between them work across editorial, branding, packaging and more.

Here, they reveal what it takes to succeed as a solo practitioner in a competitive market, and share their advice for getting more from print in an increasingly digital world...

Any advice for becoming a freelance designer?
Caterina Bianchini: It's scary. Lots of people assume they have to work for years in a studio before they can even think about going freelance. I was lucky: I noticed quickly that I was better as a freelance designer. If you have the ambition and the drive, you should do it, but it's hard work.

When I first moved to London, for about two years I was working full-time, then I'd open my laptop when I got home and start working full-time again. You need your own portfolio outside a studio, or people won't trust you because you're not a freelance designer – you've just got a studio portfolio that you've done parts of.
Clementine Carriere: The first thing I did was put money away on the side, because the first couple of months you're not quite sure what is going to happen. You might already

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VIDEO
CONTENT

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have some freelance gigs lined up, which is great. You might not. But financially you don't want to be in a place where you're stressed out. I took the first month to really focus on my portfolio and how to present myself.

Flip Pomykalo: I started freelancing with a friend of mine, who already had three or four years' experience. So right away I got thrown into bigger projects: it was kind of frightening in the beginning, but it made me develop a lot faster. It's also a really nice situation, because you can boost each other and if somebody isn't having a good day, the other person can help.

What are the challenges of being a freelance graphic designer, as opposed to an illustrator?
CC: At first, I had a fear that just offering graphic design wouldn't be enough; that I wouldn't get enough work, or the right projects. I needed to reshape my portfolio and rethink my approach, and have confidence to talk to people without being intimidated; to say 'Maybe this doesn't work for the medium,' or 'This is too expensive.'

How does it differ to being based in a studio?
CC: It's very different. Working in a studio is great because you work with more senior people who can pick up on a lot of things, and you have everything there in front of you. As a freelancer, you have to be really creative with resources. By the time I decided to go fully freelance, I had this little notebook of contacts, but going through a studio first was really important to get those. I felt like I had the right tools to be on my own.

How do you build up your contacts?
CB: I'm essentially a new business person, strategy person and studio manager. I work with people, they enjoy working together, and then they come back and say: 'We have this next project, and would love you to work on it.' But it's taken me a good three years to build up proper good clients. In terms of printers and other suppliers, it helps to find someone you work well with, and who has a design eye so they can support and help you on projects.

Do you have one piece of advice for a graphic designer about to go freelance?
CC: Put yourself out there. Get in touch with recruiters – they'll sometimes give you a call for a shift in-house, and that's really useful. And go to events. Being freelance can be lonely, so meeting people who do the same thing, talking about it and getting your brain agitated will get you more excited about what you're doing. □
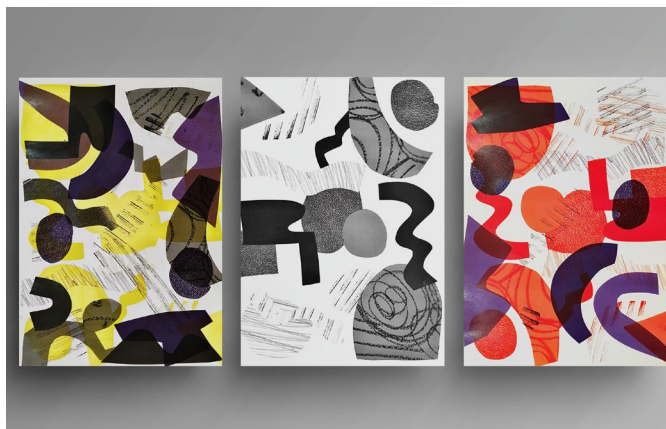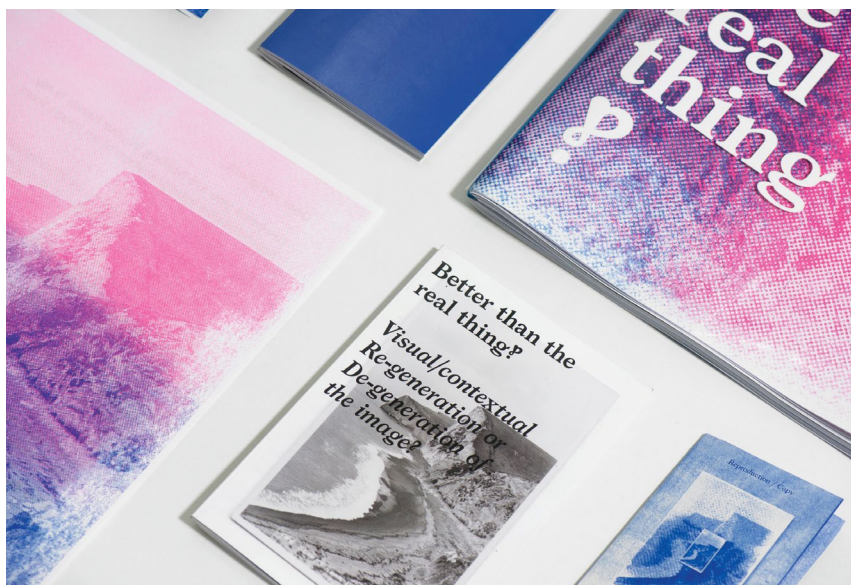
▶ **TAP TO WATCH THE VIDEO NOW**
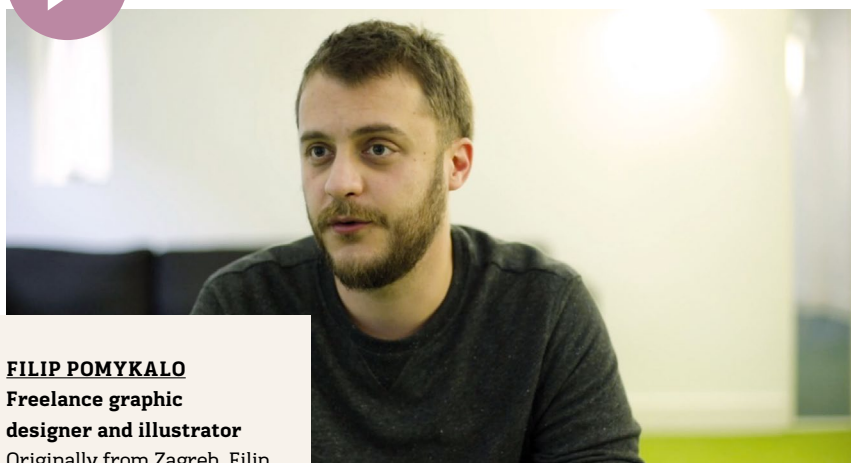
FILIP POMYKALO
Freelance graphic designer and illustrator
Originally from Zagreb, Filip Pomykalo began freelancing in 2011 after his BA studies, sharing a studio space with a more experienced freelance friend. He has just finished his MA at LCC in London.
www.pomykalo.com

MAKE THE LEAP TO FREELANCING
In our first video, Filip Pomykalo, Clementine Carriere and Caterina Bianchini discuss how they first became freelance graphic designers, and how experience, confidence and a strong support network were all essential to do so.

Right and below: Editorial design by Clementine Carriere for Loud Flash: British Punk on Paper, and SP/IP, a publication focused on typography and design.

FIVE WAYS TO GET MORE FROM PRINT

Freelancer designers Clementine Carriere and Caterina Bianchini share the wisdom of experience

1. Befriend your printer
"Sometimes the client wants something very specific, but it might not be possible physically or in terms of budget," admits Clementine Carriere. "Being able to talk freely with your printer is fantastic. Ask as many questions as you can: if they can't do it for a certain price, they might be able to help you find a better option."

2. Test finishes and paper stocks
"It's a question of budget," adds Carriere. "Can you afford it? If you can, which option is going to best serve the final project? Depending on the topic and design itself, the most appropriate finish or stock quickly becomes clear, but if you don't know, test."

3. Understand the print process
"You need to understand how certain stocks will take ink – sometimes if you have a cream stock, a light colour will sink in and actually become a lot darker," points out Caterina Bianchini. "Understand texture and the printing processes – embossing, debossing, painted sides, whatever – and how that stock will hold ink, or a deboss."

4. Match stock to the product
"A stock should have the same feel and aesthetic as the product," says Bianchini. "If it's a premium brand, it should be heavier. You could use a sandwich stock, such as a gold fill within a three-layered paper. For a music company, you might use something more interesting, like a textured stock with, say, glitter or a holographic element to add an element of surprise."

5. Limitations can be helpful
"Limitations can push you to be more creative," argues Carriere. "If you can only use one type of paper, maybe you could go crazy with colours inside. Maybe not. If you're using Risograph printing, you're limited in terms of colours. You can go more crazy with stock, but it tends to be quite specific as to what goes into the mesh and what doesn't. Limits push you to constantly rethink your project, and question why you're doing it that way and not another."

▶ TAP TO WATCH THE VIDEO NOW
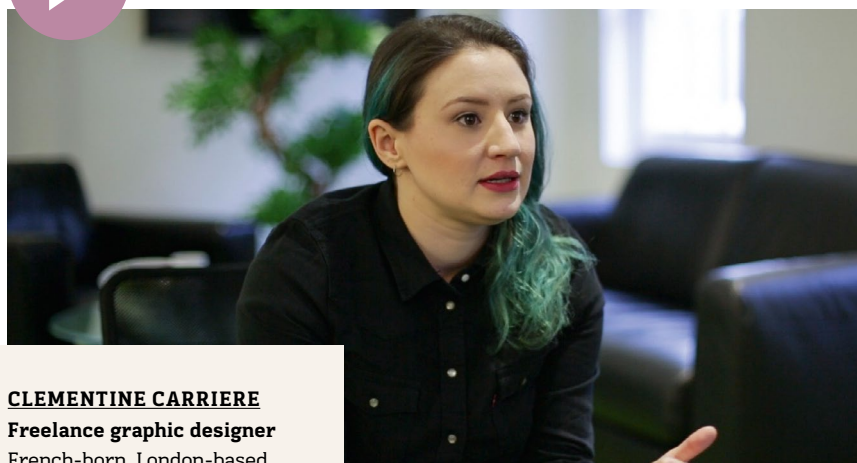
CLEMENTINE CARRIERE
Freelance graphic designer
French-born, London-based graphic designer and art director Clementine has been a full-time freelancer for just over a year, having started her career in various different design studios.
www.clementinecarriere.com

BE A SUCCESSFUL FREELANCER
In our second video, Carriere, Pomykalo and Bianchini reveal the secrets of their ongoing success as independent graphic designers, including balancing direct work for clients with in-house shifts at studios.

Right and below: Caterina Bianchini's posters for Sub Club Glasgow and L'Anatomie Edinburgh, and packaging for jewellery brand RUIFIER.

PRE-FLIGHTING TIPS

Route 1 Print reveals 10 essential things to consider when preparing your artwork for print

1 Be wary of heavy ink coverage on folded items. If a dense area is along a crease, cracking can be caused by the volume of ink being absorbed by the stock. Use lighter colours over folds for a smooth finish.

2 Increase your Cyan value to 30% more than the Magenta value, to avoid your blues being printed with too much purple.

3 Avoid banding by avoiding gradients with small ranges. Instead, add blur or soft noise effects and don't use KPEG compression.

4 Check with your printer if your design requires overprinting. This feature stops the mixing of colours when they're printed on top of another. This will also stop colours 'knocking out' others and ensures no parts of your design are unwantedly overlapped.

5 Fonts should be no smaller than 6pt to be visible when printed. If they contain fine lines, add thicker strokes to aid visibility, for light text on dark backgrounds in particular.

6 If you convert text to outlined, not only will you avoid blurring, but text will keep its shape even with large format items.

7 To create a rich black, create a specific colour including Magenta, Yellow and Cyan as well as black. Solid black areas aren't dark enough and print as more of a grey.

8 For full-scale printing, use an image resolution between 300–400dpi, but never go above 400dpi for greyscale.

9 Choose vectors or original digital images over 'web images' or 'printed documents' for optimum image quality in print.

10 Always check for unwanted spot colours in your Print Production panel.

▶ **TAP TO WATCH THE VIDEO NOW**

CATERINA BIANCHINI
Freelance graphic designer and art director
Having freelanced for four years, Caterina often pitches solo against established agencies. She loves working for the music industry, and creating vinyl covers and posters in particular.
www.caterinabianchini.com

GET MORE FROM PRINT
In our final video, Bianchini, Carriere and Pomykalo share their enduring love of print and give some top advice for making the most of the medium, from choosing the right materials to building a relationship with your printer.

Watch the videos on our YouTube channel: **www.bit.ly/ca263-freelanceprint**

RoutePrint | PRESENTS

50 MUST-READ DESIGN TIPS BY DESIGNERS FOR DESIGNERS

Improve your design skills with this new free design eBook from the UK's fastest-growing trade printer Route 1 Print

C reated by designers, for designers, this free eBook from Route 1 Print is packed with advice to help you become the best creative you can be. There's tips, tricks and techniques on everything from client management and typography, to brand identity and finding alternative textures in Photoshop.

A super handy design resource, the eBook will teach you new ways to develop your creative skills and ideas, plus how to strengthen your own design identity, improve client relationships and get the most from your print and web designs.

If you like to keep abreast of the industry, the Route 1 Print eBook also features new ways to look at the design process from influential designers such as Jacob Cass and Brent Galloway, as well as a selection of fonts that the experts never use, alternative ways to approach new work and much, much more.

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When the Route 1 Print team aren't gathering top-class design advice, they're also busy working as the UK's fastest-growing trade printer. So whether you're working as a freelancer, or in a studio that outsources print, Route 1 Print has everything you need make the process as simple and stress free as possible.

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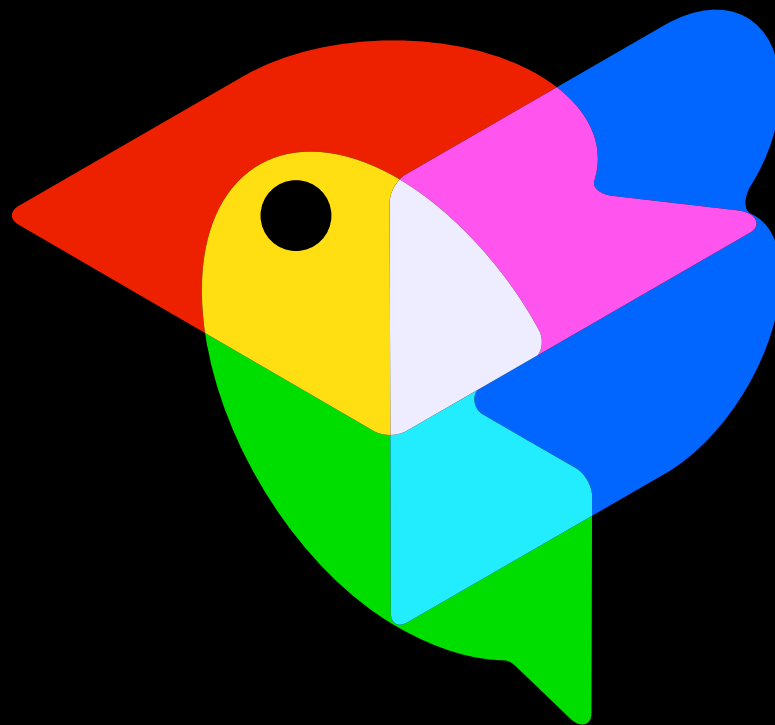
Route 1 Print's 50 design tips is available in both print and digital formats. Download the latter for free today!

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■ **PROJECT DIARY**

RGB SCHEMES: A NEW LOGO TAKES FLIGHT

How Metafizzy – aka designer Dave DeSandro – created a logo that works in 3D for VR games company, RGB Schemes

PROJECT FACTFILE

BRIEF: To produce a logo, type treatment and brand guidelines for RGB Schemes, a small video game company focused on virtual reality. The logo had to balance the fun of gaming with the dynamic capabilities of the company, and capture its defining characteristic: virtual reality.
CLIENT: RGB Schemes, www.rgbschemes.com
CREATIVE: Metafizzy, metafizzy.co
PROJECT DURATION: Two months
LIVE DATE: December 2016
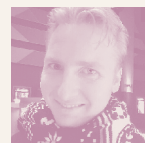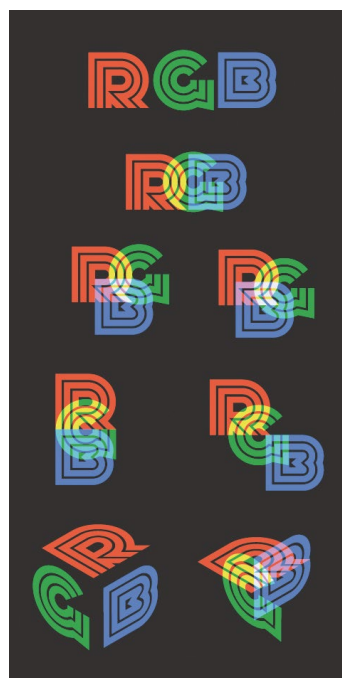
GERALD MCALISTER
Founder, RGB Schemes
Gerald McAlister is a software development engineer. He's had a passion for video games since he was a child, and set up RGB Schemes – which he originally worked on in his spare time – to focus on creating unique experiences in virtual reality.
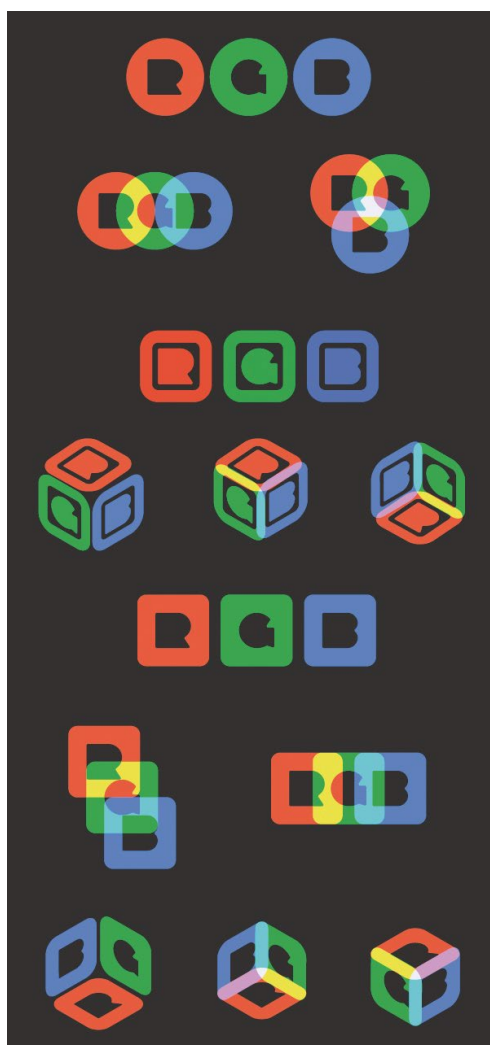
01 One early experiment was to use a '70s inline treatment for the lettering, but it generated too much detail.

02 Several other experiments with the letters and colours, which helped in the evolution of the logo.
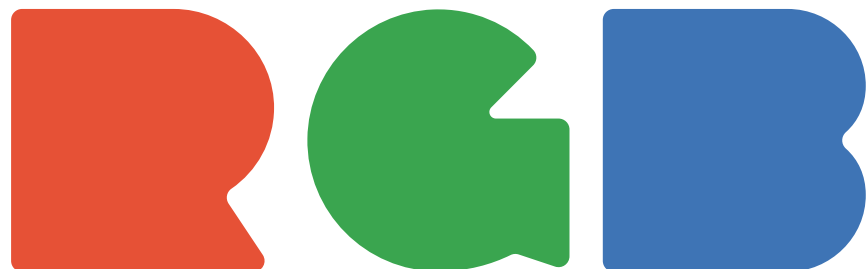
03 The final letter designs using pure colours on a flat plane.

01

02

03

THE DESIGN BRIEF
Gerald McAllister

RGB Schemes is a video game company developing virtual reality games, and we're working on our first title, which will be out this year. A friend mentioned Dave DeSandro's website to me and I began looking through his work. I really enjoyed his designs and felt they conveyed what each company did incredibly well. I asked him to design RGB Schemes' logo, and things fell into place from there.

What I really wanted the logo to convey is that this company creates fun experiences, not necessarily 'money producing' experiences. When people see the logo, I want it to remind them how much they enjoyed our games.

Virtual reality is a fairly new field that has many limitations right now. One of them is lower screen resolutions, but the logo needed to be easily viewable in a VR headset. We needed a logo that could translate well into a form that can be used in VR and for the company name to be easily readable in VR.

WORK IN PROGRESS
Dave DeSandro

Going into the project, I knew I wanted to deliver something that would work well in the VR environment, even though it was a completely foreign medium for me to consider. RGB stands for red, green and blue, and when you have a distinct, visual name like that, it's better not to overthink it. I knew the logo would have to be red, green, and blue, and these colours lend themselves to screen colour blending. Red and blue overlap to produce magenta. Right off the bat, I knew I wanted to explore that concept.

I focus on iteration early in my process. A hundred concepts have to die in order for one to live. I'll start with a basic idea, such as aligning letters, or using circles, then try lots of variations. Typically, one idea sparks another. The best way to get that new idea is to stick

04 The evolution of the logo with eight different approaches, which build up to the final chosen logo.

04

▶ with the process and start doing something. The blank page is so intimidating. Even when I start with the biggest cliché I can think of, it helps get the creative juices flowing, which eventually leads to something worthwhile.

Normally, I start off with pencil and paper sketches, but because this brief was particularly based around colour, I opted to go with vectors first. This lends itself to basic geometric shapes, which ended up coming through in the final logo. I used Illustrator to copy and paste multitudes of iterations to make a messy collage. The use of red, green and blue made for vibrant, almost glaring visuals, but they were appropriate for the project, and helped convey the whimsical and fun nature of the brand.

HONING THE TYPEFACE
Gerald McAlister

One of the trickiest areas was the typeface that would be used for the company name. We looked at lots of iterations, and some of the original fonts were difficult to read in a VR headset. We actually had to create a temporary application to display some of them and ensure they were readable while in virtual reality.

Initially, I wanted the company name to be more prominent in the logo, in order to convey ▶
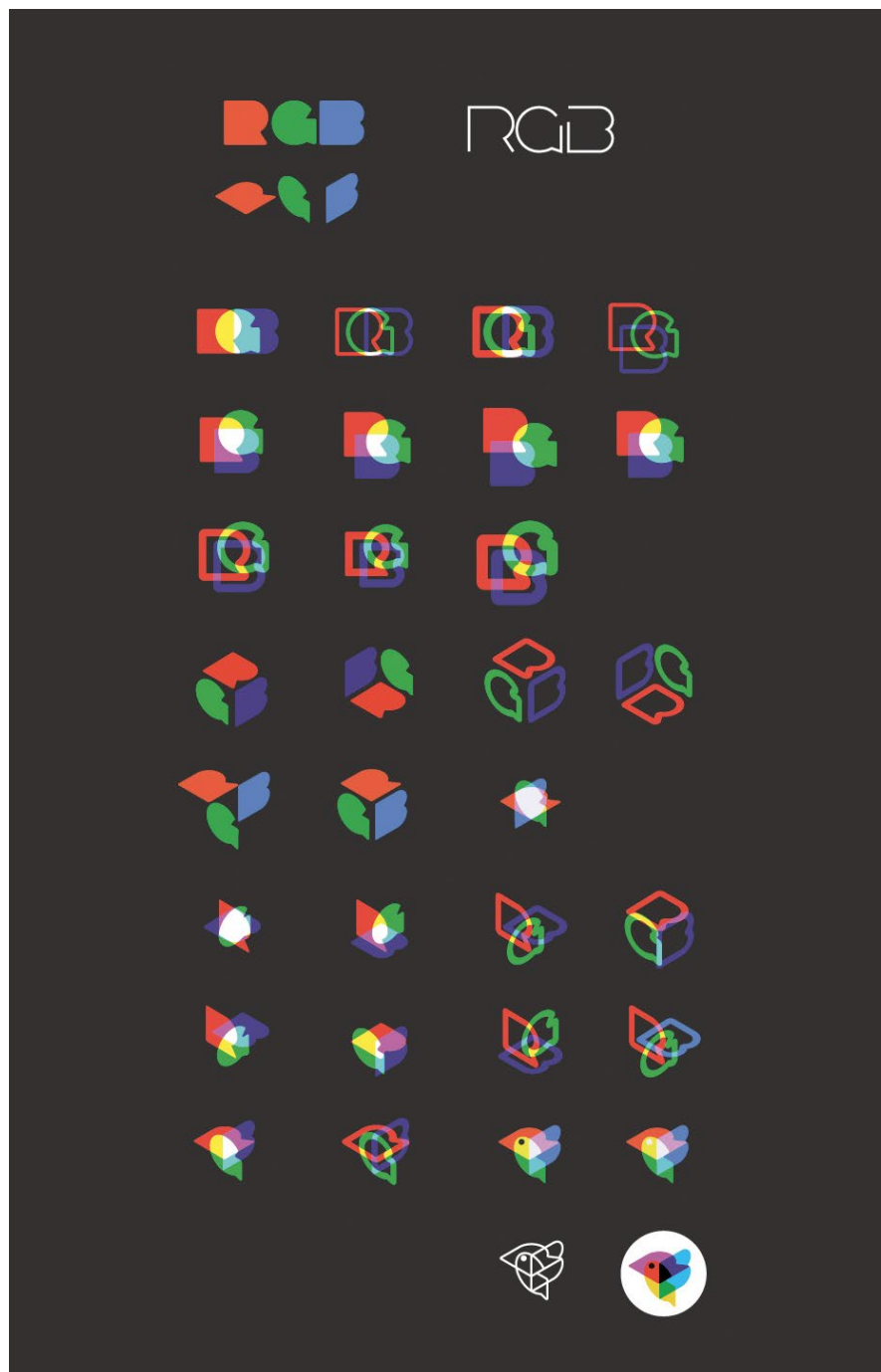
BACK TO REALITY

Dave DeSandro shares the ideas that didn't make it

This pinwheel-based form clearly represents red, green and blue colour mixing. It uses simple shapes, so it's easier to understand at a glance. But it is too generic, and doesn't say anything about the company.
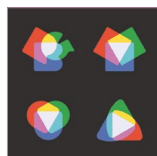
RGB is in the name, so why overthink it? Using a double stroke and geometric letterforms gives this mark a classic throwback vibe. But this didn't make the cut as the marks didn't have that extra oomph to stand out.

This penrose triangle attempts to emphasise the 'schemes' element of the brand – something with structure and form. It fits well with the brand, but is too visually complex, and hard to understand.

NEW ANGLES

Dave DeSandro explains how he went from basic forms to a 3D logo

1 Making shapes
First, I designed the letterforms so that each fitted into a square, as squares can be aligned in a variety of ways. The letters are composed of basic geometric shapes: circles and rectangles, aligned to a grid.

2 Colouring in
I coloured the letters red, green and blue, then set Screen blend mode. This way, the red, green and blue screen colours blended to produce cyan, yellow, magenta and white intersections once overlapped.

3 Finding angles
Next, I rotated the letters in 3D space using an isometric alignment. Here, each letter is angled so that it forms one face of a cube.

4 In formation
Moving the letters so that they intersect one another on their individual planes created an interesting form. The notch of the G fits right along the bottom edge of the R. I then added the eye circle to solidify the bird image. With all these elements, you see the bird first, then notice the R, G, B letters and colours.

5 Ready to render
Finally, I reverse-engineered the alignment so it can be reproduced in an actual 3D environment. The whole logo can be rendered as a 3D object, so it can be viewed and rotated in RGB Schemes' VR applications.
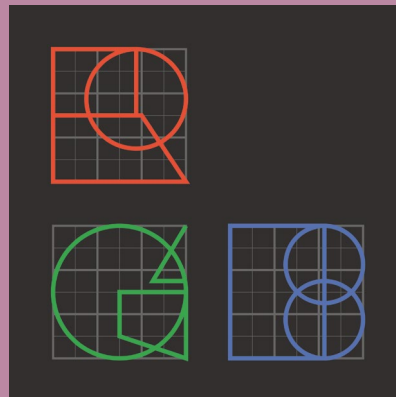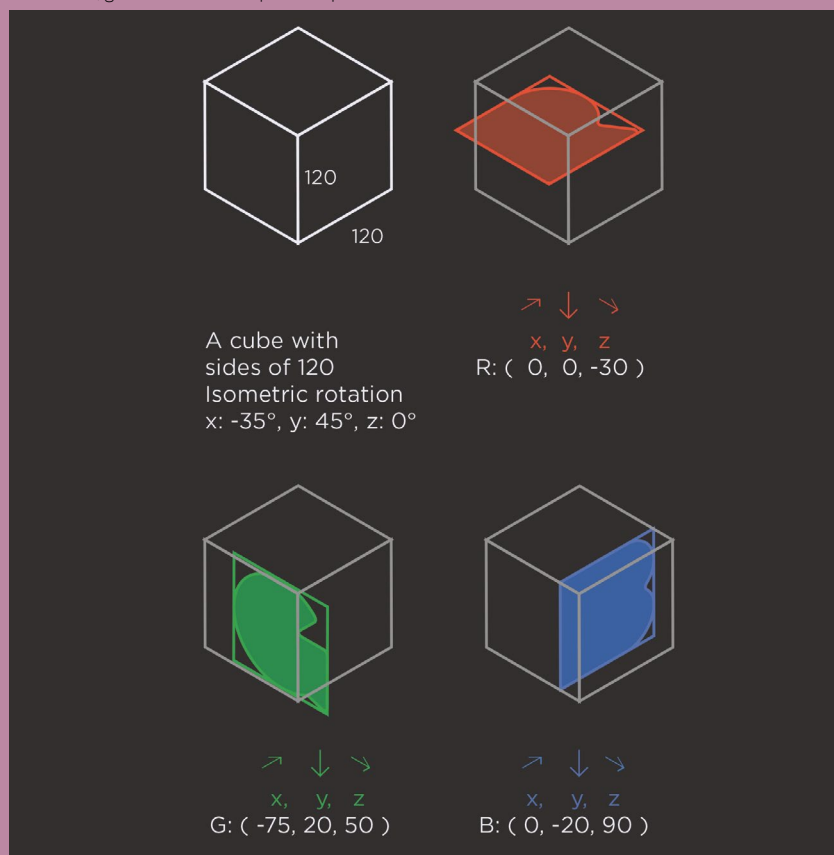

Using simple shapes to cut letters that fit.

Using additive colour theory for the logo.

The red, green and blue shapes on a plane.

The bird is formed from the letters.

A cube with sides of 120
Isometric rotation
x: -35°, y: 45°, z: 0°

x, y, z
R: (0, 0, -30)

x, y, z
G: (-75, 20, 50)

x, y, z
B: (0, -20, 90)

The exact positioning of the letters used when in a 3D application.

DAVE DESANDRO
Founder, Metafizzy
Metafizzy is Dave DeSandro's one-man studio. He codes a range of UX products for web designers, and creates logos directly for clients. His Logo Pizza project in October 2016 – 50 logos in 30 days – has powered his logo design business.

05 The final logo when used on screen, with a black background.

06 An outline version is perfect for monochrome application.

07 RGB Schemes is particularly excited about how the logo can be manipulated and rotated in 3D.

who we are. However, this resulted in too much text, and was difficult to read in VR. Because of this, we went with the bird concept, which happened to be one of the first logo designs that Dave sent. Dave was then able to add in some 3D positions for the letters to create the bird, and everything really just fitted into place from there.

SPARKS FLY
Dave DeSandro

Squares are useful because they can be lined up in multiple ways. I tried out using an isometric cube arrangement, which is a logo design cliché. By overlapping the shapes, I was able to get those secondary colours – cyan, yellow, magenta and white. So I was working with two conventions. The overlapped letters made a nice pinwheel shape. It was more abstract and unique than the cube arrangement, which is really important when making a logo.

Looking it over, I saw a little bird shape, with the corner of the R being a beak, B forming a wing, and G giving it a body and tail. Adding the circle for the eye sealed it, so that you see the colourful bird first. After giving it more time, you spot the R, G, B letters and how they overlap.

CONCLUSION
Gerald McAlister

Being able to turn our logo into a 3D object, while still being fully representative of the company, has sparked tons of ideas for how we can utilise this both in our games and throughout our advertising. We have some exciting ways lined up, and we can't wait for people to see how they will be used in our games.

I am incredibly impressed with how Dave designed this logo. When playing our first game, I am excited to see the logo boot up every time I test it out. I also really enjoy people's reactions to it, and am excited to publicly reveal the game when it's ready later this year.
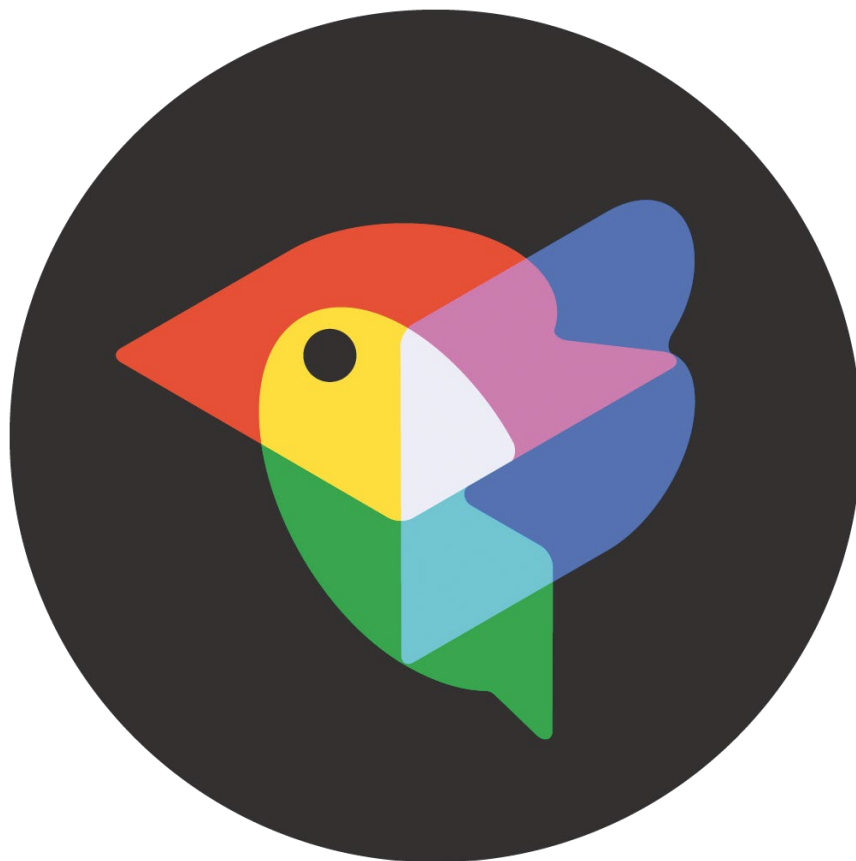
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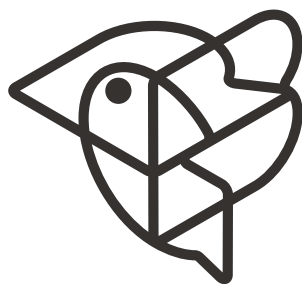
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"The bird is abstract and unique, and the overlapped letters make a nice pinwheel shape"
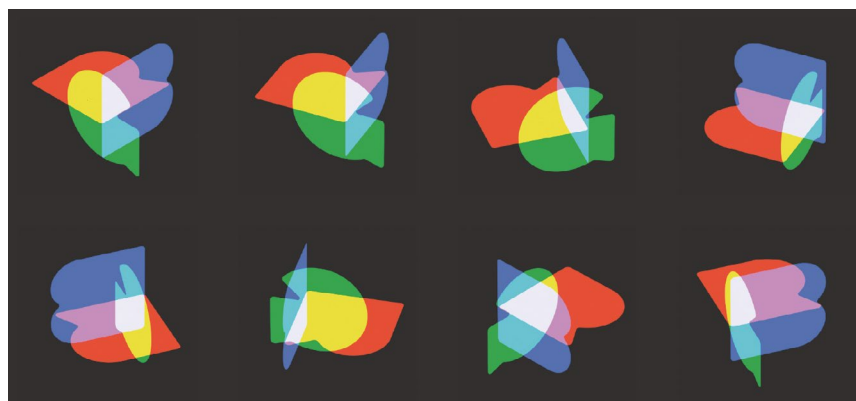
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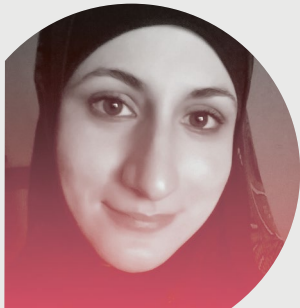
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MASTER THE RESIN CASTING PROCESS

In the second and final part of his workshop, **Matt Jones** shares how to make silicone tools to cast an army of art toys

With one silicone tool, you can resin cast up to 30 models.

MATT JONES

Matt 'Lunartik' Jones is a multimedia artist, painter, sculptor, illustrator, curator, teacher, sticker fanatic and toy designer who's probably best known for his Lunartik in a Cup of Tea toy range. The author of the Plastik Surgery Handbook, a guide to making designer art toys, Matt runs workshops on resin model casting, and works for Titan Toys franchise collectibles. www.lunartik.com

01 An example of a design produced in Super Sculpey, produced by a student from the Plastik Surgery workshop held in Vienna in 2015.

02 Use your turnaround drawing (see part one, last issue) as a shape making guide.

01

02

TOOLS AND EQUIPMENT

SAFETY EQUIPMENT:
● Goggles
● Vapour mask
● Nitrile gloves
● Plastic sheets
● Paper towels
● Cardboard box
● Old clothes

TOOLS:
● Super Sculpey oven bake clay
● Sculpting tools (plastic or wooden)
● Silver foil
● Baby powder
● Silicone rubber (Mold Star 30 or Smooth-on)
● Resin (parts A & B)
● Flat oven tray
● Several clear plastic 400ml drinking cups
● Superglue
● Car body filler (P38)
● Car paint primer
● Wooden stirrers
● Wet and dry sandpaper (fine, medium, coarse)
● Soft cleaning cloth
● Sharp knife or scalpel

GETTING PREPARED

In the first part of this workshop, in issue 262, we looked at sketching models on paper and digitally and creating art toys using clay. Now that you've practised making your model, in part two I'll show you how to make master models, produce 'one-part' silicone tools and finally, resin cast your very own art toys.

When making art toys, you'll be working with very harmful chemicals, so make sure you're using your kit in a well-ventilated environment such as a dust-free room or a covered outside space. You'll need various tools and safety equipment, see left for a full list.

MASTER MODEL MAKING

The master model is the one that we're going to use to make the silicone tool, which is a mould you can then use to make more toys using resin casting. For this method to work, your model needs to have a flat base (which is why feet work well) and must fit comfortably inside your plastic cup, sitting 10mm from the edges.

It's really important to note that any details you put into your master model will show up on your finished resin casts, even fingerprints. So if you have joints in your work, for example, under the armpits, try to make these as smooth as possible. If you leave gaps and holes, you will find that when you pour the silicone, it will go inside these areas and then get trapped and cause your silicone tool to rip and break when you try to remove your master model.

Features such having the arms out 'T' style and protruding points should be avoided where possible, but small noses, buttons, ears and eyes should be fine. For the best results, very small holes should be quite shallow.

BAKING YOUR MODEL

Use the turnaround drawing you made in part one of this workshop and scale it down to fit inside one of your plastic cups. Then take some plasticine and make a test model to the right size (see image 02). Super Sculpey clay works best if kneaded for around two minutes – this gives it strength and stops it cracking once it's hardened in the oven.

Before putting your model in the oven, put a very thin layer of Super Sculpey under the model; this will prevent the bottom from burning. Bake the clay for five minutes at a time and check its progress regularly, paying particular attention to the thinner parts of your model, which burn easily. In total, the clay can be rebaked three times, so should take around 15 minutes. If some parts do burn, don't worry too much, they can be fixed.

FINISHING YOUR MODEL

Once the model is cooled down, it will be hard. Sometimes models break, but don't panic; you can use superglue to stick them back together again. You might also want to glue more parts onto your model at this point using superglue.

Next, sand down your model using wet and dry sandpaper, which will help give you a very smooth finish. Then put on your mask, spray your model with car primer and let it dry for a few hours. Make sure you do this outside

03 The sanded down model, ready to be resprayed.

04-05 After its final spray, superglue the finished model into a plastic cup.

06-07 Measure the silicone parts out by eye, then mix together thoroughly, ensuring you mix into the corners.

08 Pour the mixed silicone into the cup containing your model until it is completely covered, with 10mm extra mix.

03

▶ in a cardboard box, with your model sitting on some card, so that you can spin it round and paint all sides of it easily.

When your model is dry, fill in any holes with P38 car body filler. This is a two-part component that you'll need to mix together. Read the instructions, and make sure you wear a mask and gloves. Once this is dry, you can repeat the sanding process and re-primer.

When you're happy and all the imperfections are removed, leave the model for a day and let it really dry and harden, and then you're ready to move onto silicone tooling.

SILICONE TOOLING

To make a working silicone tool from which we can cast many resin pieces, we will be using the plastic cup/silicone tool method I have developed. Glue your model inside the plastic cup using superglue, leaving a 10mm space between the cup and the model. Make sure your model is well sealed to the cup and leave it to dry before you start pouring silicone.

To make your silicone, pour equal parts of silicone parts A and B into separate cups, then pour all the mixture into one cup, and stir it together thoroughly using your wooden stirrers until the two combine to form one solid colour.

Next, slowly pour the silicone into a corner of the cup containing your model, then raise the cup containing the mixture to about a metre in height and try and keep a consistent stream pouring into the same corner as you started with (see image 08). The idea is that the silicone is so thin that larger air bubbles will burst and won't enter your mould. Keep going until the silicone is about 10mm over the height of your model.

Next, tap the sides of the cup to help release any unwanted larger air bubbles that are trapped inside the mixture. Then leave your cup in a warm, dust-free room to set. This will take approximately six hours, depending on the environment and the silicone rubber used.

Once the silicone has set, cut the plastic cup from the silicone tool carefully with a knife.

Clean up the hole where you can see your model with a sharp scalpel, removing any silicone that's spilled under the master model (see image 09). Then, carefully extract the master model from the silicone tool, trying not to break it. Once the master model has been released, you now have your first silicone tool.

RESIN CASTING PHASE

To prepare your silicone tool, put a dash of baby powder inside it, and shake this out into a bin (see image 11). This will help release your casts. Then place your tool directly on a warm radiator.

Now you need to mix your resin, which comes in two parts. Pour out equal amounts of both parts into separate cups, then mix the two parts together in one cup with a wooden stirrer for 30 seconds, so that the mixture becomes clear.

Once you have your mixture, pour the resin into the warmed silicone tool cavity slowly and carefully. Make sure that the resin covers all the details inside the silicone tool.

Once the resin is in the silicone tool, it will start to harden, and this involves a smelly, hot chemical reaction. Do not put your head over setting resin, and keep it away from your fingers.

If you want to make sure your cast is completely cured before removing it from the mould, then take a look at the cup you mixed the resin in. When this is set hard, the cast inside your silicone tool will also be hard.

Once it's ready, use your thumbs to remove your cast from the silicone tool. You can also press the top and pop your cast out. Now repeat this last process to produce an army of your model. Your tool will work for about 30 casts, so you might find you need more than one! □

Matt Jones will be delivering his workshop at Pictoplasma Berlin on 8–9 May: for more details, visit www.academy.pictoplasma.com

04

05

09-10 Clean up the hole with a scalpel, then release the master model from the sililcone tool, and you're ready for casting.

11-12 Add a splash of baby powder to your tool, then pour in the mixed resin.

13-14 Repeat the process to make an army of your model. Use resin pigments to add a splash of colour.

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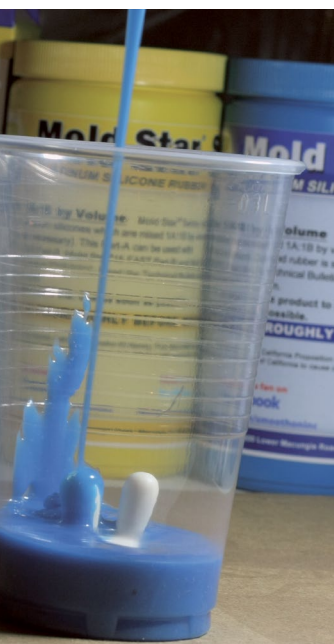
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PLASTIK SURGERY HANDBOOK

BOOK AND DOWNLOADABLE EBOOK

Ever wanted to make your own resin cast designer art toys or protoype products? Written and illustrated by Matt Jones, The Plastik Surgery Handbook features all you need to know about model making, silicone tooling and resin casting. Buy it for £12 (hard copy or digital copy). Add £3 to the hard copy to get it signed by Matt, or add £8 to receive a signed Resin Bunny with your book.
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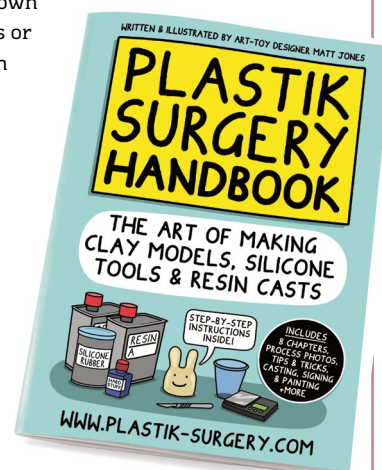
■ **PROJECT DIARY**

KODAMA: SCREENPRINTED JAPANESE SPIRITS

Illustrator **Lucille Clerc** takes us behind the scenes on this self-initiated project where she creates images of nymphs that embody the plants of the world

PROJECT FACTFILE

BRIEF: Inspired by nature, Lucille wanted to create a set of screenprints featuring her drawings of Kodama. These Japanese spirits inhabit the world's greenery and in Lucille's sets of images, they embody different types of flora including woods, succulents, algae, rainforests, mangroves and flowers in bloom.
ILLUSTRATOR: Lucille Clerc, www.lucilleclerc.com
PROJECT DURATION: On-going
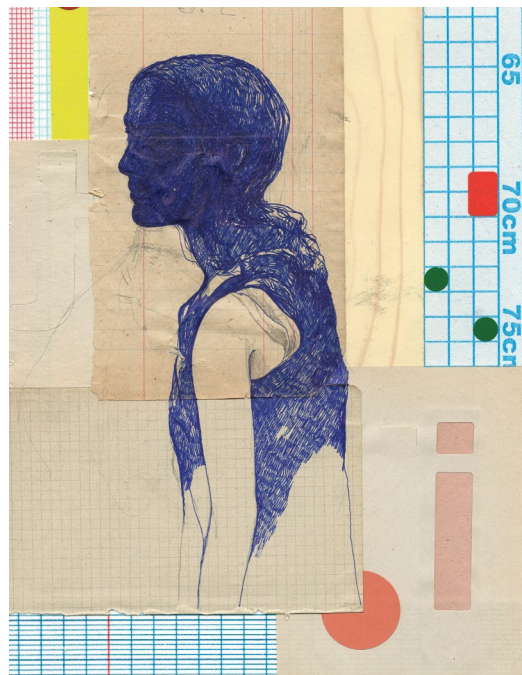
LUCILLE CLERC
Freelance illustrator
Based in London and a graduate of Central Saint Martins, Lucille is a French artist who lives in the city but loves nature. Her clients include the V&A, Fortnum & Mason, Marks & Spencer, Laurence King Publishing and DC Comics.

01-02 From intriguing tropical leaves to delicate fiddlehead ferns, dozens of elements were meticulously sketched by hand for Kodama.

03 Lucielle assembled cards and old pieces of paper and drew the silhouetted character, which is the centrepiece of each spirit, in pen.

04 Lucielle has been collecting sketches for years, adding to them with each visit to a botanical garden. Some of them became part of the Kodama spirits.

DISCOVERING KODAMA

Kodama is a personal project rooted in my love of nature. I was researching legends and traditions relating to nature and that's when I fell in love with Kodama: forest spirits from Japanese folklore. I decided they would be the focus of a series of images I would create.

My Kodama inhabit trees and are generally peaceful, but sometimes they are cross with us because of our attitude to nature. They're like nymphs that are half human, half vegetation, and they hide in our gardens and in the last bits of greenery in our cities, reminding us of how different our relationship to nature could be.

The area I come from in France plays a big part in my love of nature. I grew up near a forest, my family owned cattle, the soil is rich and people work in the mining and wood industries. I've lived in the city for 15 years, but still feel the need to go back to where I grew up. People who were born on the coast need to see the sea, I need to see forests and fields.

NATURAL IMAGERY

I've been sketching plants for a long time, in my garden and in the botanical gardens in London and France. My sketches form a large collection.

I use Moleskine and Fabriano sketchbooks because I like the format and the paper quality. I don't like drawing on white paper; off-white or coloured with a grain is better. It doesn't have to be fancy though, I also love drawing in old notebooks found in flea markets.

The drawing is done with ballpoint pens, or Bic/Muji Criterium mechanical pencils. The hardness of the graphite varies and the sizes I use go from 0.5mm to 3mm, which is very thick. I use Winsor & Newton watercolours and Lefranc Linel gouache.

I draw all the elements by hand. It is time-consuming, and is meticulous work, but I find creating the detail is really therapeutic. It puts me in a sort of hypnotic state, which is both soothing and quite addictive.

When my drawings are complete, I scan them and arrange my composition in Photoshop.

05 Test screenprints. When screenprinting four colours, registration is one of the biggest and most time-consuming challenges.

06 Work in progress sequence showing the four different ink separations of the succulent print: yellow, magenta, cyan and black.


05

06

THE RIGHT TEXTURE

Getting the texture and tone right took experimentation

I wanted the screenprints to look a bit like the illustrations found in 1960s textbooks, so that they would have a vintage feel but with a contemporary twist. It took months to find the right settings when making my silk screens and the process involved me preparing the patterns, testing exposure times and using the right amount of ink so that they were just transparent enough to hit the right tones when the different colours overlapped. Eventually, I got it.
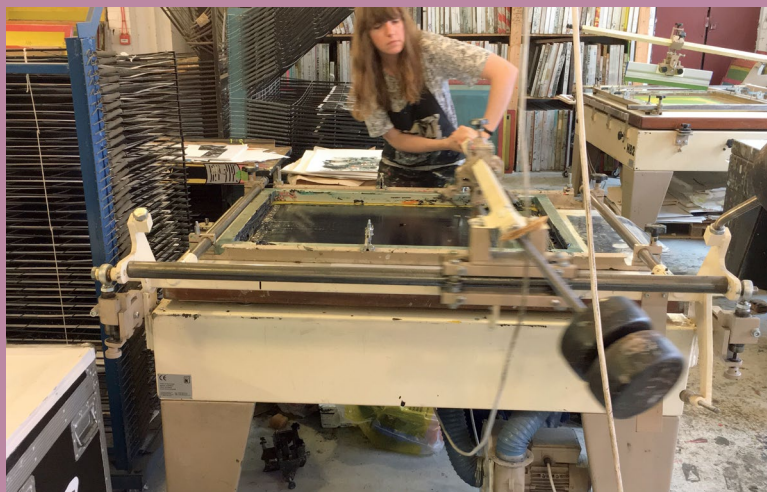
❯ I see the work done on the computer as being like the tape that holds the montage together.

The figures in the Kodama drawings are like totems that represent the seasons. Each image in the first series uses different types of plantlife; woods, succulents, algae, rainforests, mangroves and flowers in bloom.

Guilt is frequently used to get people to think about ecology. I wanted to remind them of how marvellous nature is, and convince them to care about conservation through viewing this positive and soothing message.

The colours are meant to harmonise, and one print leads on to the next. Creating them was technically challenging, but after trying different settings during the printing process, I've managed to make it work without having to simplify the artwork.

PRINTING KODAMA

When an image is complete, registration marks are added and I separate it into four colour channels – cyan, magenta, yellow and black. The layers are converted into bitmaps, and each is printed in black on a layer of clear acetate. This is the print positive.

The screens are aluminium frames with silk mesh. I use a very fine mesh to preserve the details. The fabric is coated with light sensitive emulsion, which has to go on thinly and evenly in order to get the desired effect.

I then place the positive onto the screen and expose it to sunlight, to a 500W halogen light or

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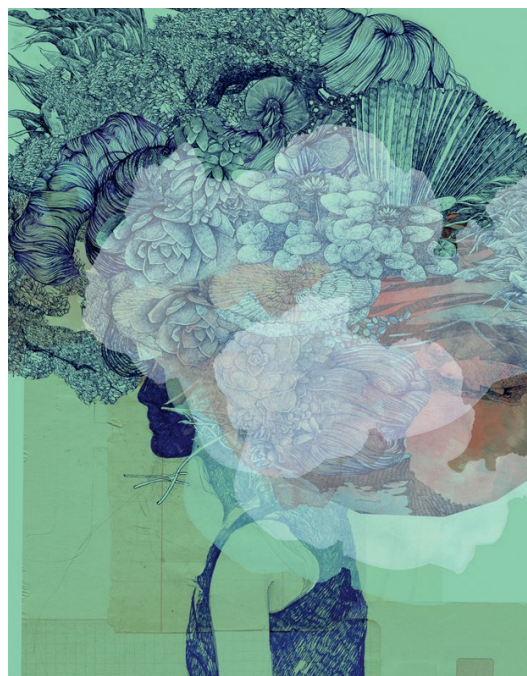
to a UV light in a vacuum exposure unit. After exposure, I wash away the unexposed emulsion and when the screen is dry, I tape over the edges to prevent ink reaching the edges of the frame. I can then print by saturating the screen with ink, which goes through onto the paper wherever the emulsion wasn't exposed to the UV light. The trick is to use the registration marks very precisely so that the colours go down exactly where they should, producing an image that is as crisp as possible. Preparing to print and sorting out registration are definitely the most time-consuming aspects of the process.

My Kodama seasonal images use various different inks – metallic, shiny and matt – so the colours interact in completely different ways. This is the great thing about screen printing: you can create something that can't be done in a digital print. It's much more subtle. The pigments are strong and long-lasting. I printed 40 of each and I'm selling them on my website, on Outline Editions and at three galleries. My goal is to keep experimenting and try new techniques. I have a new set of Kodama artworks based on the seasons, which I plan to screenprint soon. ▢

07 The Mangrove screenprints, with colours far subtler and richer than you can achieve in a digital print.

08 Mangrove's Kodama spirit has a semi-submerged hint about it.

09 Bloom is an optimistic image and is full of petals of many descriptions – each painstakingly sketched and shaded..

SCREENPRINT MASTERCLASS

Lucille shares key advice for creating your own screenprints

1. START SIMPLE
For your first screenprint, do something simple, perhaps use just two colours, and keep the edition small. You'll be surprised at what you can achieve with just two layers.

2. USE GOOD MATERIALS
Get yourself a good quality screen, high quality polyester printing paper and a good squeegee. Screenprinting is time-consuming so you want it to look good when it's done.

3. CLEAN UP
Be sure to wash all your tools and equipment after you've finished printing. Your materials will only last and remain able to produce fine prints if you cherish them.

TEACH YOURSELF!

We're in the era of new technology, with development moving so fast that older generations find it very hard to keep up. One clear example is that many don't know how the world's most valuable brands make their money. Back in the day this was common knowledge. Today, people have no clue how Google and Facebook make their money.

So, how to take advantage of this? Well teaching yourself your profession is one great way to grasp this opportunity. There are so many tutorials and online courses on the internet where you can learn almost anything. But of course there are problems. Learning how to use a piece of software won't make you a graphic designer, and it certainly won't make you a good one. You have to know all about things such as composition, typography and white space – stuff that takes a long time to learn and isn't just a simple combination of steps done in the Adobe suite.

On the other hand, our industry is becoming more and more keen on niche specialties. So if you spend 10,000 hours drawing handmade typography, you will most probably become incredible at it and this will land you freelance jobs. And there are many books that you can buy and read to teach yourself the history and theory of areas such as design, illustration and film.

The education system we have today is also changing radically. There are now one-year courses that teach you how to become an art director. One year is definitely not enough for this. Calling yourself an art director after one year of studying will most likely create awkward situations.

So I guess a mix of approaches to education is the best at the moment. This mix will vary depending on your skills. Illustration can be easier to teach yourself, while typography demands a bit more training with someone who knows the rules. At the same time, as I mentioned, there are plenty of books and online courses to choose from. But hey, having friends is a great thing and studying at university will most probably give you some of your closest future friends.

SNASK OFF!

Snaskified is a recurring column by Snask, the internationally renowned creative agency that strives to challenge the industry by doing things differently. Snask worships unconventional ideas, charming smiles and real emotions, and see the old conservative world as extremely tedious and as the world's biggest enemy.

Fredrik Öst
■ www.snask.com
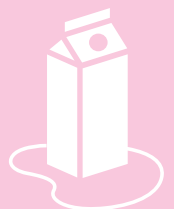
ENEMY OF THE MONTH

Darkness
Yes, it's spring but that means different things in different parts of the world. We're from Sweden and up here the darkness is something that keeps us motivated to work but also to crawl in a hole.

GOSSIP
Q & A

Q: Did all of you at Snask study at a university?
A: Yes, kind of, we at least had some form of higher education. Most of us studied abroad.

CANDY THUMBS UP!

Kind acts
Sometimes you see everyday acts of kindness. It's cliché to say so, but it is wonderful to see someone going about their ordinary business and taking time to help a fellow citizen.

FILTH THUMBS DOWN!

Horrible rebrands
Agencies that are shit at what they're doing, but land a rebrand project where they destroy an absolutely perfect identity with a new gradient, shiny logotype and ugly colours.

NEXT MONTH

MASTER THE CRAFT OF LOGO DESIGN

SPECIAL REPORT

The world's top 10 cities for designers to live, work and visit – and how you can make the most of them

VIDEO INSIGHT

Purpose reveals how its rigorous creative process creates design with substance

Plus: inspiring projects, current trends and expert analysis from the global design scene

ON SALE 3 MAR

*Co-creative director of GBH London and 2015's D&AD President, **Mark Bonner**, reveals how his love for motor racing sparked a new hobby*
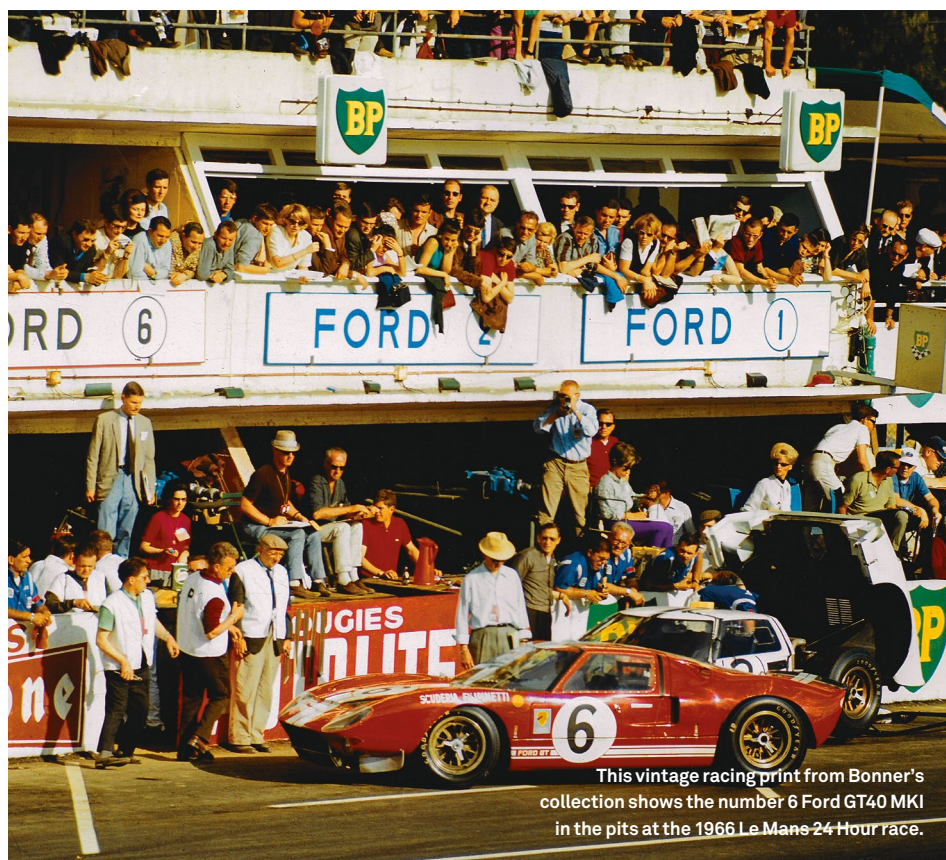
SWITCHING LANES

I read somewhere that when asked what he likes to do most, David Hockney replied: 'I'd like to paint a door, with a big brush. One flat, shiny colour. Red, that's my favourite.'

Having been a designer for 30 years now, I still find that what gets me fired up is making things. In my day job, we make stuff all day long, but I'm more of a conductor than a soloist these days. I love nothing more than rolling up my sleeves and getting my hands dirty, and I'm on a quest to get this simple, tactile pleasure back through my passion for motor racing.

In 2002, I went to the 24 Heures du Mans race in France. I fell in love with it and have been back for every race since. It's an epic test of engineering and human endurance, and an incredible assault on the senses. I could write a whole magazine about how visceral it is, how beautiful the cars have always been, and the incredible courage required to drive for 24 hours without stopping at speeds approaching 400km/h on a 'green' circuit carved out of Route Nationale in rural France. How the smell of trackside BBQs and Grand Marnier crêpes becomes irresistible at twilight, what it's like to watch from atop the famous Ferris wheel as the cars snake through the Ford chicane leaving trails of streaking headlights, or sunrise at Mulsanne corner watching the brake discs glowing red hot as they scrub off speed into this famous corner from a nearly three-mile-long straight. There's also so much history: Steve McQueen's film, the crash that killed 48 fans in 1955, the Gulf Porsche 917, the classic posters, and of course, the drivers themselves.

My love affair with this place and its race led me to buy a house nearby. In fact, I drew a 30-minute radius around the track

This vintage racing print from Bonner's collection shows the number 6 Ford GT40 MKI in the pits at the 1966 Le Mans 24 Hour race.

on a map and settled on a place situated right in the heart of Le Mans folklore, between a tiny town called Teloché (where the Porsche 917s were race prepared in 1971) and La Chartre sur le Loir (home of the iconic Hotel de France, which among a slew of famous names, hosted John Wyer's victorious GT40 teams). Back in the day, the participating teams used to drive their cars to the race on public roads. In fact, they drove right past our house.

One June evening in 2008, while I was watching the mechanics in the pit lane at Le Mans working on more modern cars through my binoculars, it hit me. The commentator was referencing my favourite race car, winner of Le Mans from 1966 to 1969: Ford's incredible GT40. I decided that I was going to build my own.

While working as President of D&AD in 2015, I promised myself I was going to learn to be a car mechanic in the evenings, just for fun. I looked for night school classes until someone told me that I might stick out just a bit at the local college, given my age and my day job.

Last year, I learned a lot restoring an old Honda motorbike and one day soon, a replica 1967 Ford GT40 will be delivered to my garage in France in around 2,500 individual parts. They say it'll take 800 hours to assemble, give or take. My wife thinks I'm mad, and you might think the same, but some day, I'll drive it along that road from my house to the track, just like Chris Amon did before he won the race in 1966. How hard can it be? I might even do a David Hockney and paint it red. ☐

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